

ENTERED

January 19, 2023

Nathan Ochsner, Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

MAGĒMĀ TECHNOLOGY LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§	CIVIL ACTION NO. H-20-2444
	§	
PHILLIPS 66, PHILLIPS 66 CO.,	§	
and WRB REFINING L.P.,	§	
	§	
Defendants.	§	

MEMORANDUM OPINION AND ORDER

This action is brought by plaintiff, Magēmā Technology LLC ("Magēmā"), against defendants, Phillips 66, Phillips 66 Company, and WRB Refining L.P. (collectively, "Defendants"), under the Patent Act of the United States, 35 U.S.C. § 101, et seq., for alleged infringement of four United States Patents for refining marine fuel oil:¹ (1) U.S. Patent No. 10,308,884 ("the '884 Patent"), entitled "Heavy Marine Fuel Oil Composition," issued on June 4, 2019;² (2) U.S. Patent No. 10,533,141 ("the '141 Patent"), entitled "Process and Device for Treating High Sulfur Heavy Marine Fuel Oil For Use as Feedstock in a Subsequent Refinery Unit," issued on January 14, 2020;³ (3) U.S. Patent No. 10,604,709 ("the '709 Patent"), entitled "Multi-Stage Device and Process for

¹Complaint for Patent Infringement ("Plaintiff's Complaint"), Docket Entry No. 1.

²Exhibit 1 to Plaintiff's Complaint, Docket Entry No. 1-1.

³Exhibit 2 to Plaintiff's Complaint, Docket Entry No. 1-2.

Production of a Low Sulfur Heavy Marine Fuel Oil from Distressed Heavy Fuel Oil Materials," issued on March 31, 2020;⁴ and (4) U.S. Patent No. 10,584,287 ("the '287 Patent"), entitled "Heavy Marine Fuel Oil Composition," issued on March 10, 2020.⁵ Pending before the court are Magēmā's Motion to Strike Certain Opinions of Defendants' Damages Expert Thomas Britven ("Plaintiff's Motion to Strike Defendants' Expert Britven") (Docket Entry No. 155), Defendants' Motion for Partial Summary Judgment of Noninfringement and Exclusion of Expert Testimony ("Defendants' MPSJ and Motion to Exclude") (Docket Entry No. 158), Magēmā's Motion for Partial Summary Judgment of Infringement and Application of 35 U.S.C. § 295 to Establish a Presumption of Infringement ("Plaintiff's MPSJ and Application of 35 U.S.C. § 295") (Docket Entry No. 161), Magēmā Technology LLC's Corrected Motion to Exclude the Opinions and Testimony of Defendants' Expert Edward L. Sughrue II ("Plaintiff's Corrected Motion to Exclude Dr. Sughrue") (Docket Entry No. 163), Plaintiff's request to strike the Declaration of Thomas Allen made in Magēmā's Reply Brief in Support of Its Motion for Partial Summary Judgment of Infringement and Application of 35 U.S.C. § 295 to Establish a Presumption of Infringement ("Plaintiff's Reply in Support of MPSJ and Application of 35 U.S.C. § 295") (Docket Entry No. 192), and Defendants' Request for Leave to Supplement its

⁴Exhibit 3 to Plaintiff's Complaint, Docket Entry No. 1-3.

⁵Exhibit 4 to Plaintiff's Complaint, Docket Entry No. 1-4.

Response to Magēmā's Motion for Partial Summary Judgment of Infringement ("Defendants' Request to Supplement") (Docket Entry No. 198). For the reasons stated below Defendants' Request to Supplement will be denied; the pending motions to strike and/or exclude expert testimony will be denied without prejudice, Defendants' MPSJ will be denied; Plaintiff's MPSJ will be granted in part and denied in part, and Plaintiff's request for application of 35 U.S.C. § 295 will be denied.

I. Background and Undisputed Facts

A. Technical Background, Asserted Patents and Claims

The asserted patents teach a process for making low sulfur heavy marine fuel oil ("HMFO") that complies with two industry standards: (1) ISO 8217:2017 from the International Standards Organization ("ISO"); and (2) Revised Annex VI to MARPOL (the International Convention for the Prevention of Pollution from Ships). ISO 8217:2017 contains standards for bulk properties of marine fuels, which are organized into two families: "Distillate marine fuels" identified in ISO 8217 Table 1 ("Table 1"),⁶ which are not covered by the claims of the asserted patents; and "Residual marine fuels" identified in ISO 8217 Table 2 ("Table

⁶ISO 8217, pp. 8-9, Exhibit 5 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158-5, pp. 16-17.

2"),⁷ which are covered by the claims of the asserted patents. Table 2 sets forth sixteen physical properties for "Residual marine fuels." Revised Annex VI to MARPOL reduced the maximum sulfur content of marine fuels from 3.5% by weight to 0.5% effective 2020 ("IMO 2020 Sulfur Cap"). The process taught by the asserted patents involves hydroprocessing ISO 8217:2017 Table 2 compliant HMFO that has a sulfur content greater than 0.5%, i.e., the HMFO being sold before 2020, to reduce the sulfur to less than 0.5% to comply with the IMO 2020 Sulfur Cap.

B. Procedural Background

Magēmā filed its Complaint for Patent Infringement (Docket Entry No. 1) on July 13, 2020. On October 30, 2020, the court entered a Scheduling Order (Docket Entry No. 23), which set dates for the close of fact and expert discovery as November 11, 2021, and December 9, 2021, respectively.

On July 8, 2021, the court held a hearing pursuant to Markman v. Westview Instruments, Inc., 116 S. Ct. 1384, 1387 (1996) (Docket Entry Nos. 45 (minutes) and 47 (transcript)), and on July 28, 2021, the court issued a Memorandum Opinion and Order ("Markman Order," Docket Entry No. 50) holding that the disputed term "HMFO" means "[a] petroleum product fuel compliant with the ISO 8217:2017

⁷Id. at 10-11, Exhibit 5 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158-5, pp. 18-19.

standards for bulk properties of residual marine fuels except for the concentration levels of the Environmental Contaminates.” Magēmā Technology LLC v. Phillips 66, No. H-20-2444, 2021 WL 3186532, * 16 (S.D. Tex. July 28, 2021). The court also held that two other disputed terms, i.e., (1) “[having] a maximum [of kinematic viscosity/of density/carbon residue] . . . between the range of . . .,” and (2) “[a] low sulfur hydrocarbon fuel composition consisting essentially of: a majority by volume of a 100% hydroprocessed high sulfur residual marine fuel oil and a minority by volume of Diluent Materials,” needed no construction because each was subject to its plain and ordinary meaning. Id.

Shortly after issuing the July 28, 2021, Markman Order, the court issued an Order Granting Joint Motion for Referral for Mediation (Docket Entry No. 52), which referred the case to Senior Judge Nancy Atlas for mediation. The parties mediated on September 22, 2021, but did not settle (Docket Entry No. 56).

On September 22, 2021, Plaintiff filed a motion to compel seeking production of “physical feed and product samples from specific locations within the process flow route of the accused hydrotreaters.”⁸ Plaintiff acknowledged that Defendants “proposed

⁸Plaintiff Magēmā Technology LLC’s Motion to Compel, Docket Entry No. 54, p. 2. See also id. at 3 (“The issue before this Court to rule upon is whether to compel Defendants to produce physical samples of the feeds to and the products from the accused hydrotreaters at the locations identified in Exhibit A and all related physical instrumentation (“PI”) and laboratory data for the (continued...)”)

using data collected from two permanent sample points in the refineries," but argued that "the feed sample point and the product sample point are located in places that would not provide an accurate picture of the physical properties of the total feed."⁹ Defendants responded that they had never opposed "providing samples of fluids from its custom built sample stations located throughout its refineries," but that they did oppose "providing samples from unsafe locations in the refinery, especially when such samples are unnecessary to analyze infringement in this case."¹⁰

On October 7, 2021, Magēmā served the Expert Report of Dr. James G. Speight ("Dr. Speight").¹¹

On November 4, 2021, Magistrate Judge Christina A. Bryan held a hearing and heard argument from the parties on Plaintiff's Motion

⁸(...continued)
period of time over which samples are collected."). Page numbers for docket entries in the record refer to the pagination inserted at the top of the page by the court's electronic filing system, CM/ECF.

⁹Id. at 8. See also Magēmā Technology LLC's Reply in Support of Its Motion to Compel Physical Samples (ECF No. 54), Docket Entry No. 59, pp. 1-4.

¹⁰Defendants' Response in Opposition to Plaintiff's Motion to Compel, Docket Entry No. 57, p. 1.

¹¹Magēmā's Opposition to Defendants' Motion for Partial Summary Judgment and Exclusion of Expert Testimony (ECF 158) ("Plaintiff's Opposition to Defendants' MPSJ and Motion to Exclude"), Docket Entry No. 174, p. 10. See also Expert Report of Dr. James G. Speight, Exhibit 12 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158-12, p. 8.

to Compel.¹² On November 8, 2021, Judge Bryan issued an order that granted in part and denied in part Plaintiff's Motion to Compel and extended the deadline "pertaining to supplemental reports from November 18, 2021[,] to November 29, 2021[,] so that Magēmā may supplement its opening technical expert report and damages expert report to address discovery produced since the submission of the respective opening reports."¹³

On November 29, 2021, Magēmā served Dr. Speight's Corrected Infringement Report.¹⁴

On December 30, 2021, the parties filed a Joint Motion for Extension of Time (Docket Entry No. 72) seeking a two week extension of the motions and briefing deadlines, which the court granted (Docket Entry No. 73).

On January 12, 2022, Magēmā served Dr. Speight's Second Supplemental Infringement Report.¹⁵

On January 13, 2022, the parties filed a second Joint Motion for Extension of Time (Docket Entry No. 74) seeking an extension of all pending deadlines to allow the parties to create a set of

¹²Transcript of November 4, 2021, Motion Hearing, Docket Entry No. 68.

¹³Order, Docket Entry No. 67, p. 2.

¹⁴See Plaintiff's Opposition to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 174, p. 10.

¹⁵Id. See also Second Supplemental Infringement Report of Dr. James G. Speight, Exhibit 16 to Defendants' MPSJ, Docket Entry No. 159-5, p. 7.

stipulated facts related to the processes, equipment, and operational data at issue, stating that “[t]he parties expect the stipulation and related supplemental production of documents will narrow disputes between the parties and the experts.”¹⁶ On January 14, 2022, the court issued an Order (Docket Entry No. 75) granting the parties’ joint motion for extension of time as follows:

January 27, 2022	Stipulation/Supplemental Production
February 10, 2022	Supplemental Expert Reports
February 24, 2022	Discovery on Supplemental Reports
March 3, 2022	Rebuttal Expert Reports

On January 21, 2022, Plaintiff filed Plaintiff Magēmā Technology LLC’s Motion to Enforce Court’s Order on Motion to Compel (ECF 67) and Award Sanctions for Defendants’ Noncompliance (Docket Entry No. 76). Plaintiff explained that following the hearing held on its Motion to Compel

Judge Bryan entered an Order (ECF 67) granting-in-part and denying-in-part the motion, and ordering, inter alia, that:

By November 18, 2021, the parties shall meet and confer to negotiate a stipulation that identifies and describes Defendant’s DCS data and laboratory data, including descriptions, where appropriate, of data tags, testing methods, and units of measurement. The purpose of the stipulation is to provide a common understanding of what the DCS and laboratory data represents such that disputes about the meaning of the DCS and laboratory

¹⁶Joint Motion for Extension of Time, Docket Entry No. 74, p. 1.

data will be avoided and the parties' respective experts will be entitled to rely on a common understanding of what the Defendants' data represents.

ECF 76 (emphasis added). The hearing transcript reflects the mutual understanding at the time that a stipulation would be finalized after the parties met and conferred, certainly before the supplemental expert report deadline on November 29, 2021. This did not happen. In fact, Magēmā's technical expert was (again) placed in the position of providing a supplemental report addressing new data, without the benefit of the stipulation.

Magēmā has diligently drafted and sent revisions to the draft stipulation to Defendants, without the benefit of Defendants' knowledge [of] feeds and products along their process flow routes or meaningful input from Defendants. Magēmā sent the last version of proposed revisions to Defendants on December 8, 2021. . . . Given that the short extension period for the stipulation has almost passed, and this entire week has passed without Defendants providing their revisions, Magēmā is forced to file this motion and request sanctions.

. . . .

. . . Defendants' only response to the status of Defendants' revisions to the stipulation was:

We are still waiting for information from the client on both Wood River and Bayway, and so I do not expect to send a revised draft today. This has taken far longer than expected, but we can address any problems created with an extension as needed to the schedule.

. . . Despite having the draft stipulation for over seven weeks, Defendants now request even more time and suggest another case extension, without any date certain by which they will complete their investigation.¹⁷

¹⁷Plaintiff Magēmā Technology LLC's Motion to Enforce Court's Order on Motion to Compel (ECF 67) and Award Sanctions for Defendants' Noncompliance, Docket Entry No. 76, pp. 5-8.

On February 7, 2022, Judge Bryan set a February 11, 2022, hearing date.¹⁸ On February 11, 2022, Defendants responded by asking the court to deny the

motion to enforce the Court's order because Phillips 66 has already twice complied by providing a revised stipulation addressing every requirement of the order. Further, Phillips 66 requests clarification from the Court that any stipulation finally submitted to the court must be agreed to by both parties.¹⁹

After holding a hearing, Judge Bryan granted in part and denied in part Plaintiff's motion, and ordered the parties

to enter into a stipulation containing the jointly negotiated paragraphs identified at ECF No. 79 at 4 (i.e., ECF No. 79-4 at ¶¶ 17-19, 23-25, 29-38, 44-46, 50, 53, 56-57, 64-66, 69, 71, 74, 77, 88-99) no later than February 15, 2022.²⁰

Judge Bryan also ordered the parties to "submit a joint proposed order extending the current deadlines in the docket control order (ECF No. 23, as amended by Docket Entry Nos. 73 and 75)."²¹

On February 15, 2022, the court issued an Order (Docket Entry No. 83), which referred this case to Judge Bryan for all pretrial matters. On the same day the parties filed a Joint Notice of Stipulation (Docket Entry No. 84), and a Stipulation (Docket Entry No. 84-1).

¹⁸Notice of Setting, Docket Entry No. 78.

¹⁹Defendant Phillips 66's Response to Motion to Enforce Order, Docket Entry No. 79, pp. 1-2.

²⁰Order, Docket Entry No. 81, p. 1.

²¹Id.

On February 16, 2022, the parties filed a Joint Motion for Extension of Time (Docket Entry No. 85), which the court granted (Docket Entry No. 86). The new deadlines were:

March 1, 2022	Supplemental Infringement and Damages Expert Reports
March 15, 2022	Discovery and Supplemental Reports
March 29, 2022	Rebuttal Expert Reports
April 12, 2022	Dispositive and Non-Dispositive Motions

On February 19, 2022, Plaintiff filed a second motion to compel discovery (Docket Entry No. 88), and a motion for a finding of spoliation and sanctions against Defendants for deliberate destruction of evidence (Docket Entry No. 90). In the pertinent part of its second motion to compel, Plaintiff argued that

Defendants [] have repeatedly blocked Magēmā from obtaining physical samples of their feeds and products. In doing so, Defendants contend that their data is sufficient. At the same time, Defendants have produced what appears to be intentionally incomplete testing on the exact physical properties on which they rely [] for their non-infringement arguments. Defendants contend that they routinely test samples, but the fact is that they rarely test any one sample to provide all information. They have admitted that many of the requisite ISO 8217 Table 2 properties are “not routinely tested.” . . . Magēmā fully expects Defendants to argue that they have produced all data and testing in their possession. Nonetheless, Magēmā seeks an order compelling Defendants to produce such data and testing. Defendants are unlikely to undertake the exhaustive search demanded by the importance of this data and testing until ordered to do so. Magēmā further requests that this Court order Defendants to certify to the Court once they have fully complied with their discovery obligations and any Order to prevent delays.²²

²²Plaintiff Magēmā Technology LLC’s Second Motion to Compel
(continued...)

In the motion seeking a finding of spoliation and sanctions, Plaintiff argued that

Defendants intentionally destroyed many hundreds (if not thousands) of physical samples of their feed to and products of their Bayway DSU-1 hydrotreater and their Wood River ULD-2 hydrotreaters (Accused Hydrotreaters) during this litigation and after Magēmā repeatedly requested these samples in discovery. Defendants even destroyed samples that they tested in support of their non-infringement defense, while failing to produce any portion of them to Magēmā.²³

On February 28, 2022, the parties filed a Third Joint Motion for Amended Scheduling Order (Docket Entry No. 94), which the court granted on March 3, 2022 (Docket Entry No. 96). The new deadlines were:

April 7, 2022	Supplemental Infringement and Damages Expert Reports
April 21, 2022	Discovery and Supplemental Reports
May 5, 2022	Rebuttal Expert Reports
May 19, 2022	Dispositive and Non-Dispositive Motions

On March 14, 2022, Defendants filed responses in opposition to Plaintiff's motion for spoliation and sanctions and second motion to compel discovery (Docket Entry Nos. 98 and 99, respectively). On March 18, 2022, Defendants filed a Corrected Response in Opposition to Plaintiff's Second Motion to Compel (Docket Entry No. 105).

²² (...continued)
Discovery on Various Issues, Docket Entry No. 88, p. 9.

²³Magēmā Technology LLC's Motion for Spoliation Finding and Sanctions Due to Defendants' Deliberate Destruction of Evidence, Docket Entry No. 90, p. 5.

On March 23, 2022, Judge Bryan held a hearing and heard argument on Plaintiff's motions at which the court denied Plaintiff's motion for spoliation and sanctions without prejudice to re-raising the issue regarding Defendants' failure to perform testing for data regarding the sixteen ISO 8217 physical properties at issue, and granted in part and denied in part Plaintiff's second motion to compel as stated in an Order (Docket Entry No. 118) entered on March 29, 2022. The court also ordered the parties to meet and confer on missing data, to submit a joint letter outlining any remaining disputes, and to file a jointly proposed amended scheduling order to provide for the completion of discovery prior to the submission of supplemental expert reports.²⁴

On April 6, 2022, the parties filed a Fourth Joint Motion for Amended Scheduling Order (Docket Entry No. 123), which the court granted (Docket Entry No. 124). The new deadlines were:

May 23, 2022	Supplemental Infringement and Damages Expert Reports
June 6, 2022	Discovery on Supplemental Reports
June 20, 2022	Rebuttal to Supplemental Infringement and Damages Expert Reports
July 5, 2022	Dispositive and Non-Dispositive Motions
July 26, 2022	Responsive Briefs
August 2, 2022	Reply Briefs

On April 8, 2022, Defendants filed a Stipulation Regarding ISO 8217 Characteristics (Docket Entry No. 125).

²⁴Id. at 2-3. See also Minute Entry for Hearing Held on March 23, 2022.

On April 14, 2022, Plaintiff filed a letter regarding the remaining discovery disputes (Docket Entry No. 126). Defendants responded on April 21, 2022 (Docket Entry No. 127), and on April 29, 2022, Judge Bryan entered an Order (Docket Entry No. 128), resolving the parties' discovery disputes.

On May 23, 2022, the parties filed their Fifth Joint Motion for Amended Scheduling Order (Docket Entry No. 131), which the court granted (Docket Entry No. 132). The new deadlines were:

May 31, 2022	Supplemental Infringement and Damages Expert Reports
June 14, 2022	Discovery and Supplemental Reports
June 28, 2022	Rebuttal to Supplemental Infringement and Damages Expert Reports
July 12, 2022	Dispositive and Non-Dispositive Motions
August 2 2022	Responsive Briefs
August 9, 2022	Reply Briefs

On May 31, 2022, Magēmā served Dr. Speight's Consolidated Infringement Report.²⁵

On June 17, 2022, the parties filed a Joint Mediation Status Report and Joint Motion to Extend the Mediation Deadline in the Mediation Referral Order (Docket Entry No. 136), stating that they agreed to engage in a second mediation on August 30-31, 2022, and requesting an extension of the mediation deadline established in

²⁵Plaintiff's Opposition to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 174, p. 10. See also Consolidated and Supplemental Infringement Expert Report of Dr. James G. Speight, p. 115, Exhibit 17 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 159-6, p. 14.

the Order referring the case to mediation (Docket Entry No. 52) to August 31, 2022. On June 21, 2022, the court granted the request and entered an Order Extending Mediation Deadline (Docket Entry No. 137).

On July 11, 2022, the parties filed a Sixth Joint Motion for Amended Scheduling Order (Docket Entry No. 143), which the court granted (Docket Entry No. 144). The new deadlines were:

August 3, 2022	Dispositive and Non-Dispositive Motions
August 24, 2022	Responsive Briefs
September 6, 2022	Reply Briefs

On July 27, 2022, the parties filed a Seventh Joint Motion for Amended Scheduling Order (Docket Entry No. 148), which the court granted (Docket Entry No. 149). The new deadlines were:

	Current Deadline	Requested Deadline
Supplemental Infringement Report		August 3, 2022
Rebuttal Report		August 17, 2022
Expert Discovery		August 24, 2022
Dispositive and Non-Dispositive Motions	August 3, 2022	September 8, 2022
Responsive Briefs	August 24, 2022	September 29, 2022
Reply Briefs	September 6, 2022	October 6, 2022

On August 3, 2022, Magēmā served Dr. Speight's Supplemental Infringement Report.²⁶

²⁶Plaintiff's Opposition to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 174, p. 10. See also Supplement to the Consolidated Infringement Expert Report of Dr. James G. Speight, (continued...)

C. Undisputed Facts²⁷

Plaintiff accuses Defendants of infringing the Asserted Patents through hydroprocessing operations at its Bayway and Wood River refineries, where Defendants hydroprocess (or hydrotreat) petroleum products to make a marketable low sulfur HMFO. In general, hydroprocessing (or hydrotreating) exposes liquid petroleum products to hydrogen at elevated temperatures and pressures in the presence of a catalyst to promote the chemical change of sulfur into hydrogen sulfide gas that can then be removed from the liquid petroleum products.

ISO 8217 Table 2 sets forth sixteen physical properties for "Residual marine fuels."²⁸ Important to the pending motions is that Table 2 requires a minimum flash point of 60° C (140° F).²⁹

Flash point is the temperature at which the vapors of a fuel ignite (under specified test conditions), when a test flame is applied. In other words, flash point represents the lowest temperature at which a liquid will form a vapor in the air near its surface that will "flash" or briefly ignite when exposed to an open flame. The flash point is a general indicator of the

²⁶(...continued)

Exhibit 17 to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161-17.

²⁷These undisputed facts are excerpted for purposes of ruling on the pending motions from Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158, pp. 7-13; Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, pp. 13-19; and Defendants' Response to Magēmā's Motion for Partial Summary Judgment of Infringement and Application of Presumption of Infringement ("Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295"), Docket Entry No. 176, pp. 7-10.

²⁸ISO 8217, pp. 10-11, Exhibit 5 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158-5, pp. 18-19.

²⁹Id. at 10.

flammability or combustability of a liquid. Flash point is important to the safety of storing petroleum products.³⁰

The Bayway hydrotreater is referenced throughout the parties' briefing as the DSU-1 hydrotreater. Feed to Bayway's DSU-1 hydrotreater is usually a combination of two and sometimes three streams: heavy cycle heating oil ("HCHO"), heavy cycle gas oil ("HCGO"), and sometimes light cycle heating oil ("LCHO"). At times the feed also includes a recycle stream.³¹ Defendants regularly sample and test the feed to the DSU-1 hydrotreater, including for flash point, using the testing method provided by ATSM D93. Defendants sample the feed before any recycled products are added to the feed and before the feed enters the surge drum referred to variously as Vapor Disengaging Drum and Drum D-101. Drum D-101 typically operates at a temperature of 270° F. After Drum D-101 no material is added to or removed from the Bayway feed until it is mixed with hydrogen gas to form a Feedstock Mixture. Plaintiff moved to compel production of samples taken after Drum D-101, but the court denied that motion after Defendants argued that establishing a sampling station after Drum D-101 would be expensive, unsafe, and not necessary for proving Plaintiff's allegations of infringement.

³⁰Consolidated Expert Report of Edward L. Sughrue II on Non-Infringement, p. 21, Exhibit 11 to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161-11, p. 6.

³¹See Defendants' Second Supplemental Responses to Plaintiff's Second Set of Interrogatories, Supplemental Response to Interrogatory No. 11 (March 14, 2022), pp. 13-17, Exhibit 6 to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161-6, pp. 11-15.

II. Defendants' Request for Leave to Supplement Will Be Denied

Without citing any authority, Defendants "request[] leave to supplement [their] response (ECF 176) in opposition to Magēmā's motion for partial summary judgment of infringement (ECF 161) with evidence of flash point testing from a new sample station."³² Defendants explain that

[t]he parties dispute the flash point of feed after passing through drum D-101. See Motion, ECF 161 at 16. Phillips 66 has recently installed a new sample station that can collect samples and measure the flash point of material after drum D-101. Accordingly, this new evidence is relevant to a key issue in the motion.

Phillips 66 proposes to supplement its prior response with a 1-page brief and a 2-page declaration describing the recently installed sample station and the resulting measurements of flash point. . . .³³

Citing inter alia, Federal Rules of Civil Procedure 16, 26, and 37, Plaintiff responds that Defendants' motion should be denied and that its untimely evidence should be excluded because it has limited evidentiary value and is unduly prejudicial, a continuance would not cure the prejudice, and Defendants have provided no reasonable explanation for their untimely production.³⁴ Relying on Rules 26 and 37, Defendants reply that the evidence is not untimely because it was produced as soon as it existed.³⁵

³²Defendants' Request to Supplement, Docket Entry No. 198, p. 1.

³³Id. (citing Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, p. 22).

³⁴Magēmā's Opposition to Defendants' Motion for Leave to Supplement Its Response (ECF No. 198) ("Plaintiff's Opposition to Defendants' Request to Supplement"), Docket Entry No. 199.

³⁵Defendants' Reply in Support of Its Request for Leave to
(continued...)

A. Applicable Law

Defendants' request to supplement asks the court to allow evidence of flash point from samples taken at a newly established sample station, i.e., after Drum D-101. The Federal Circuit "appl[ies] regional circuit law to evidentiary issues." VirnetX, Inc. v. Cisco Systems, Inc., 767 F.3d 1308, 1324 (Fed. Cir. 2014).

Federal Rule of Civil Procedure 16(b) gives district courts broad discretion to enforce deadlines in their scheduling orders. Batiste v. Lewis, 976 F.3d 493, 500 (5th Cir. 2020). Under Rule 16(b) (4), a scheduling order may be amended "only for good cause." The good cause standard requires the party seeking relief to show that the deadlines could not reasonably have been met despite the diligence of the party needing the extension. See S&W Enterprises, L.L.C. v. SouthTrust Bank of Alabama, NA, 315 F.3d 533, 536 (5th Cir. 2003). When determining whether a movant has established good cause to amend a scheduling order to allow additional evidence, courts consider four factors: "(1) the explanation for the failure to timely [comply with the scheduling order]; (2) the importance of the [evidence]; (3) potential prejudice in allowing the [evidence]; and (4) the availability of a continuance to cure such prejudice." Id. See also Batiste, 976 F.3d at 500 (identifying these four

³⁵ (...continued)

Supplement Its Response to Magēmā's Motion for Partial Summary Judgment of Infringement ("Defendants' Reply in Support of Request to Supplement"), Docket Entry No. 200, pp. 2, and 10-18.

factors as factors the Fifth Circuit considers in determining whether a district court abused its discretion by excluding evidence as a means of enforcing its scheduling order).

Federal Rule of Civil Procedure 26(e) (1) provides that a party who has made a disclosure under Rule 26(a) or responded to an interrogatory

must supplement or correct its disclosure or response:
(A) in a timely manner if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing.

Fed. R. Civ. P. 26(e) (1) (A).

Federal Rule of Civil Procedure 37(c) (1) provides, "[i]f a party fails to provide information . . . as required by Rule 26(a) or (e), the party is not allowed to use that information . . . to supply evidence on a motion, at a hearing, or at trial, unless the failure was substantially justified or is harmless." Additionally or instead of this sanction, a district court:

- (A) may order payment of the reasonable expenses, including attorney's fees, caused by the failure;
- (B) may inform the jury of the party's failure; and
- (C) may impose other appropriate sanctions, including any of the orders listed in Rule 37(b) (2) (A) (i)-(vi).

Fed. R. Civ. P. 37(c) (1) (A)-(C). To determine if a late disclosure is "substantially justified" or "harmless," courts consider essentially the same factors used to decide if good cause has been

shown to amend a scheduling order: “(1) the importance of the evidence; (2) the prejudice to the opposing party of including the evidence; (3) the possibility of curing such prejudice by granting a continuance; and (4) the explanation for the party’s failure to disclose.” Primrose Operating Co. v. National American Insurance Co., 382 F.3d 546, 563-64 (5th Cir. 2004) (quoting Texas A&M Research Foundation v. Magna Transportation Inc., 338 F.3d 394, 402 (5th Cir. 2003)).

B. Analysis

1. Defendants’ Explanation for the Timing of Their Request

As explained in § I.B, above, and in Plaintiff’s briefing, on September 22, 2021, Magēmā moved to compel Defendants to produce physical samples of the feeds to and the products from the accused hydrotreaters at specific locations, including after the Feed to Heater (SP4) located after the feed had passed through Drum D-101 at the Bayway refinery.³⁶ Defendants responded that they had never opposed providing samples of fluids from its custom built sample stations located throughout its refineries, but that they opposed providing samples from other locations requested by Plaintiff,

³⁶Plaintiff Magēmā Technology LLC’s Motion to Compel, Docket Entry No. 54, p. 3, and Exhibit A, Docket Entry No. 54-2 (seeking “Feed to Heater” “At suction of Pump P101A, Pump P101B, or Pump P101C”). See also Magēmā Technology LLC’s Reply in Support of Its Motion to Compel Physical Samples (ECF No. 54), Docket Entry No. 59, p. 3 (identifying the requested sample point as “SP4”).

including SP4 located after Drum D-101, because those locations were not safe and samples from those locations were not necessary to analyze infringement in this case.³⁷ Plaintiff replied by narrowing its request to two sample points that constitute "total feed" to each of the two accused hydrotreaters.³⁸ The sample requested from the Bayway refinery was for "Feed to Heater ('SP4') At suction Pump P101A, Pump P101B, or Pump P101C,"³⁹ which is a location after Drum D-101.⁴⁰

At a hearing held on November 4, 2021, Judge Bryan told the parties that she was not keen on ordering sampling that Defendants told her was not safe and would cost hundreds of thousands of dollars to make safe, but that Plaintiff's contention the

³⁷Defendants' Response in Opposition to Plaintiff's Motion to Compel, Docket Entry No. 57, pp. 1, 9-10 ("That leaves samples SP3, SP4, and SP5. Magēmā articulates no need for these samples, much less any relevance to alleged infringement. Indeed, they are irrelevant to the asserted claims. Moreover, sampling at these locations would require Phillips 66 to launch an MOC process, and then modify its equipment and/or make those locations physically accessible to mitigate risks. . . For these, and for all the same safety issues and cost burden associated with sampling from unusual locations described for Wood River, Magēmā's request should be denied.").

³⁸Magēmā Technology LLC's Reply in Support of Its Motion to Compel Physical Samples (ECF No. 54), Docket Entry No. 59, pp. 2-3.

³⁹Id. at 3 (reiterating its request for "Feed to Heater" "At suction of Pump P101A, Pump P101B, or Pump P101C" and identifying that requested sample as "SP4").

⁴⁰See Map of the Bayway Refinery, Exhibit 12 to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161-12, p. 2.

information was needed to satisfy its burden of proof made sense.⁴¹ Nevertheless, after Defendants argued that Plaintiff did not need the requested samples to satisfy its burden of proof,⁴² the court denied Plaintiff's motion to compel production of samples from locations other than Defendants' existing sample stations, including samples being sought from after Drum D-101.⁴³

On October 27, 2022, almost one year after opposing Plaintiff's motion to compel the production of samples from after Drum D-101, and persuading the court to deny Plaintiff's motion to compel the production of such samples, Defendants filed the pending request for leave to supplement stating that "Phillips 66 has recently installed a new sample station that can collect samples . . . of material after drum D-101."⁴⁴ Defendants assert that

Phillips 66 installed the sampling station in order to safely test for flash point after Magēmā injected and then expanded its D-101 infringement theory **after the close of discovery**. Moreover, no rule of discovery or order required Phillips 66 to invest the resources and effort to install the D-101 sampling station earlier in this case.⁴⁵

⁴¹Transcript of November 4, 2021, Motion Hearing, Docket Entry No. 68, p. 14:3-9.

⁴²Id. at 14:10-15:14.

⁴³Id. at 23:1-12.

⁴⁴Defendants' Request to Supplement, Docket Entry No. 198, p. 1.

⁴⁵Defendants' Reply in Support of Request to Supplement, Docket Entry No. 200, p. 4 (emphasis added).

Defendants' assertion that they installed a sampling station after Drum D-101 to safely test for flash point after Magēmā injected and then expanded its drum D-101 infringement theory following the close of discovery is not supported by the record. Defendants were placed on notice of the relevance of Drum D-101 at least as early as September 22, 2021, when Plaintiff filed its motion to compel production of sample SP4 from after Drum D-101.⁴⁶ The relevance of Drum D-101 was also raised in the initial report of Plaintiff's expert, Dr. James G. Speight, which was served on Defendants on October 7, 2021,⁴⁷ and in the opposition that Defendants mounted to Plaintiff's motion to compel.⁴⁸ Moreover, Dr. Speight was questioned about Drum D-101 during his deposition on January 5, 2022.⁴⁹ The record shows that Defendants were not

⁴⁶Plaintiff Magēmā Technology LLC's Motion to Compel, Docket Entry No. 54, p. 3, and Exhibit A, Docket Entry No. 54-2 (seeking "Feed to Heater" "At suction of Pump P101A, Pump P101B, or Pump P101C"). See also Magēmā Technology LLC's Reply in Support of Its Motion to Compel Physical Samples (ECF No. 54), Docket Entry No. 59, pp. 2-3 (reiterating its request for "Feed to Heater" "At suction of Pump P101A, Pump P101B, or Pump P101C" and identifying that requested sample as "SP4").

⁴⁷Expert Report of Dr. James G. Speight, Exhibit 12 to Defendants' MPSJ and Motion to Exclude, pp. 92-94 ¶¶ 276-78, Docket Entry No. 158-12, pp. 5-7.

⁴⁸Defendants' Response in Opposition to Plaintiff's Motion to Compel, Docket Entry No. 57, pp. 1, 9-10 (challenging the relevance of sample SP4, Feed to Heater located after Drum D-101).

⁴⁹Oral Videotaped Deposition of Dr. James G. Speight ("Speight Deposition"), pp. 70:10-85:24, 193:16-197:6, Exhibit 15 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158-15, pp. 14-19.

only on notice of the relevance of Drum D-101 before fact discovery closed on November 11, 2021, and long before expert discovery closed on June 14, 2022, but also that Defendants successfully opposed Plaintiff's effort to compel production of samples from after Drum D-101.⁵⁰ Despite being put on notice of the relevance that samples taken from after Drum D-101 have to this action, Defendants chose not to take samples from that location. Now, after successfully challenging Plaintiff's request for samples from after Drum D-101, long after discovery has closed, and after the parties have finished briefing cross motions for partial summary judgment, Defendants seek to supplement their opposition to Plaintiff's MPSJ with samples taken from the location that they previously argued was neither safe nor relevant. Defendants' request to supplement essentially seeks to reopen discovery to sample feed after Drum D-101 to explore whether feed there meets the ISO 8217 flash point. Defendants have failed to provide a reasonable explanation for their failure to sample feed after Drum D-101 before the discovery deadlines. Defendants were put on notice of the issue in September of 2021, yet waited until discovery had closed, and cross motions for partial summary judgment had been fully briefed to establish a station to sample feed after drum D-101. Accordingly, the court concludes that this factor weights against granting Defendants' motion to supplement.

⁵⁰Transcript of November 4, 2021, Motion Hearing, Docket Entry No. 68, p. 23:1-12.

2. Importance of the Evidence

Defendants argue that the supplementary evidence they seek to cite is important because “[t]he parties dispute the flash point of feed after passing through drum D-101,”⁵¹ and that the “recently installed new sample station [] can collect samples and measure the flash point of material after drum D-101.”⁵²

Defendants argue that

Magēmā claims that the flash point tests have limited evidentiary value, but the new tests undercut a primary basis for Magēmā’s motion for partial summary judgment. In its motion, Magēmā argues that the relevant point for calculating flash point is after drum D-101, and then calculates the flash point as exceeding the required minimum of 140° F. The new D-101 flash point measurements instead show that the flash point is less than 140° F, thereby directly contradicting the estimates relied upon by Magēmā.⁵³

Defendants explain that “[t]he results to date confirm that the flash point after drum D-101 remains well under the required minimum 140° F. . . . The results also confirm that drum d-101 does not remove light hydrocarbons or increase the flash point of fuel passing through it.”⁵⁴ Asserting that Magēmā moves for partial summary judgment of infringement at Bayway based on the flash point

⁵¹Defendants’ Request to Supplement, Docket Entry No. 198, p. 1.

⁵²Id.

⁵³Defendants’ Reply in Support of Request to Supplement, Docket Entry No. 200, p. 4.

⁵⁴Id. at 8.

of the feedstock after passing through drum D-101, and that Magēmā relies on expert testimony that the flash point exceeds 140° F after the light hydrocarbons are removed by drum D-101, Defendants argue that

[t]he flash point measurement[s] from the new sample station after drum D-101 contradict the opinions relied upon by Magēmā and create fact issues as to whether drum D-101 affects flash point and whether the flash point after drum D-101 exceeds the required minimum of 140° F.⁵⁵

Plaintiff argues that Defendants' recent testing has limited evidentiary value because missing from the declaration of Bayway refinery employee John Allen concerning test results from the recently installed sample station "is any statement that Phillips has not changed or altered the operation of DSU-1 or the D-101 vapor disengaging drum prior to this new sampling."⁵⁶ Plaintiff argues that

[i]f Phillips changed or altered the process, then the test results are necessarily not representative of the prior operation of DSU-1. And if whatever changes made are temporary, when Phillips reverts back to its prior operation, these test results would not be relevant to the issue of ongoing infringement either. The proffered results may merely show one snapshot of an altered operation that would not be commercially viable in the long term. That Phillips can manipulate its processes now to obtain such results for a handful of days is not meaningful to the analysis of infringement over the past 36 months. Moreover, the raw data contains anomalies

⁵⁵Id. at 9.

⁵⁶Plaintiff's Opposition to Defendants' Request to Supplement, Docket Entry No. 199, p. 10 (citing Supplemental Bayway Declaration of John Allen ("Allen Declaration"), Exhibit A, Docket Entry No. 198-1, pp. 5-7).

such as an inexplicable and substantial time difference (hours) between the collection of samples before and after the D-101 drum. Because Phillips refused to produce these samples before the close of discovery, Magēmā has no way to test the proffered evidence at this late juncture in the case.

Further, Phillips submits no expert declaration about how this testing impacts infringement. Phillips only proffers a scant two page declaration from its employee, who is not an expert and cannot provide expert testimony about noninfringement or draw conclusions about the significance of the testing.⁵⁷

Although Defendants argue that testing of samples from the recently installed sample station constitute important evidence that contradict the opinions of Plaintiff's expert because they show that the flash point of feed into the Bayway hydrotreater is less than the minimum of 140° F required for infringement, the evidentiary value of these samples is diminished by their production long after discovery closed and too late for the their reliability to be evaluated or their impact on infringement to be assessed by the parties' experts. Moreover, their recent production precludes them from having any evidentiary value with respect to whether Defendants' infringed the asserted patents from November of 2020, when this action was filed, to October of 2022 when the new samples were taken. Accordingly, the importance of the supplemental evidence is minimal.

Moreover, missing from Defendants' briefing in support of its motion to supplement is Defendants' recognition that in response to

⁵⁷Id. at 10-11.

Plaintiff's motion to compel sampling from the location where Defendants have created the new station for taking the samples on which they now seek to rely, Defendants argued that Plaintiff did not need samples from that location to establish infringement. Defendants argued that

Magēmā requests samples of the combined feed and product streams into each hydrotreater, but Phillips 66 does not have a sample station to collect the combined streams. The Magēmā patents focus on the properties of the feed into the hydrotreater and the product coming out of it. During operation of the accused hydrotreaters, Phillips 66 recycles part of its product stream back through the hydrotreater to meet volumetric flow requirement of the unit when fresh feed is not enough. Phillips 66 does not monitor the conditions of this combined fresh feed and recycled product streams because it is immaterial to operating the unit, so it does not have a sample station for this combined stream.

Magēmā can estimate the physical properties of the combined streams with the samples from the feed and product sampling stating using information produced about the relative volumetric flow of those streams into the unit, but Magēmā raises incorrect concerns about the accuracy of the flow data. . . Magēmā believed there were significant discrepancies in the reported flows for one of the units, which could not be addressed by a deponent without further investigation. . . . Phillips 66 subsequently investigated and provided Magēmā with information through a recent interrogatory response that detailed the error in their analysis and how the meters accurately measured flow within acceptable expectations.⁵⁸

⁵⁸Defendants' Response in Opposition to Plaintiff's Motion to Compel, Docket Entry No. 57, pp. 6-7.

Asserting that “[t]here are a lot of different ways to try to get to the estimates of combining these streams,”⁵⁹ Defendants’ counsel agreed to discuss the data with Plaintiff’s counsel and stipulate to a written document clarifying what the available data represents.⁶⁰

3. Potential Prejudice in Allowing the Evidence

Plaintiff argues that

[p]ermitting Phillips to belatedly introduce and rely upon evidence that it refused to produce during discovery would unduly prejudice Magēmā. Phillips’ late production denied Magēmā any meaningful opportunity to question the proffered evidence, including inter alia, the extent to which Phillips altered the operation of the D-101 vapor disengaging drum and the feed components during sampling. . . . The untimely production also denied Magēmā the opportunity to depose a Bayway representative about this testing and sampling. It further denied Magēmā the ability to have its expert review and consider this repeatedly-requested evidence, which ultimately necessitated reliance on other evidence, including inter alia, the Riazi calculations.⁶¹

Defendants reply that

Magēmā claims prejudice, but any perceived prejudice may be addresse[d] through limited supplemental briefing and discovery as needed. Magēmā continues its complaints of alleged discovery abuses by Phillips 66, but the record to date shows that Magēmā has protracted this litigation through extensive motion practice that has effectively failed to prove any meaningful discovery failures by Phillips 66, much less discovery abuses.⁶²

⁵⁹Id. at 25:15-16.

⁶⁰Id. at 24:20-25:19.

⁶¹Plaintiff’s Opposition to Defendants’ Request to Supplement, Docket Entry No. 199, p. 12.

⁶²Defendants’ Reply in Support of Request for Leave to (continued...)

The court concludes that granting Defendants' motion to supplement would be unduly prejudicial. Defendants' argument that any prejudice caused to Plaintiff could be addressed by limited supplemental briefing and discovery fails to acknowledge that reopening discovery at this late stage of the case would not only require yet another amendment to the court's scheduling order, which has already been amended eight times, but would also require additional fact and expert discovery, additional depositions, additional expert reports, and possibly another round of summary judgment motions. The amount of duplicative work required would unnecessarily burden the time and resources of both the parties' and the court. Accordingly, this factor weighs against granting the Defendants' motion.

4. Availability of a Continuance to Cure Such Prejudice

Plaintiff argues that a continuance would not cure the undue prejudice that granting Defendants' motion to supplement would cause.⁶³ Although no trial date has been set, this action is at an advanced stage. All fact and expert discovery is closed. The parties' cross motions for partial summary judgment are ripe for decision, and once those motions have been ruled upon, this case will be ready for trial. A continuance would not cure but would,

⁶² (...continued)
Supplement, Docket Entry No. 200, p. 4.

⁶³Plaintiff's Opposition to Defendants' Request to Supplement, Docket Entry No. 199, p. 13.

instead, exacerbate the prejudice that granting the Defendants' motion to supplement would cause by necessitating discovery to be reopened, likely prompting a second round of summary judgment briefing, and delaying trial into the unforeseeable future. Accordingly, this factor weighs against granting Defendants' motion to supplement.

C. Conclusions

As detailed above in § I.B, the court entered a Docket Control Order in this case on October 30, 2020 (Docket Entry No. 23), which set dates for the close of fact and expert discovery as November 11, 2021, and December 9, 2021, respectively. Since then, the dates for expert discovery have been amended five times (Docket Entry Nos. 75, 86, 96, 124, and 132), the final date being June 14, 2022 (Docket Entry No. 132). Defendants' motion to supplement their response to Plaintiff's motion for partial summary judgment with newly developed evidence is essentially a request to reopen discovery filed on October 27, 2022, almost a year after fact discovery closed on November 11, 2021, and over four months after expert discovery closed on June 14, 2022. Regardless of whether Defendants' motion to supplement is analyzed pursuant to the factors that courts consider when deciding if good cause exists to amend a scheduling order under Rule 16(b), or if a late disclosure is "substantially justified" or "harmless" under Rule 37, the factors all weigh against granting Defendants' motion. Accordingly, Defendants' Motion to Supplement will be denied.

III. Motions to Exclude or Strike Expert Testimony

Pending before the court are two motions to exclude: (1) Plaintiff's Corrected Motion to Exclude Dr. Sughrue (Docket Entry No. 163), and (2) Defendants' Motion to Exclude Magēmā's expert opinions on flash point at Bayway and on damages to the extent that they include non-infringing barrels included in Defendants' MPSJ and Motion to Exclude (Docket Entry No. 158). Also pending before the court is Plaintiff's request to strike the Declaration of John Allen made in Plaintiff's Reply in Support of MPSJ and Application of 35 U.S.C. § 295 (Docket Entry No. 192).

A. Applicable Law

Federal Rule of Evidence 702 allows expert testimony to be admitted if it assists the trier of fact to understand the evidence or determine a fact in issue. Fed. R. Evid. 702. Rule 702 states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

When asked to do so, a district court must make a preliminary determination as to whether the requirements of Rule 702 are satisfied with respect to a particular expert's proposed testimony. See Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2796 (1993) (citing Fed. R. Evid. 104(a), which states, "[t]he court must decide any preliminary question about whether a witness is qualified, . . . or evidence is admissible."). Courts act as gatekeepers of expert testimony "to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Kumho Tire Co., Ltd. v. Carmichael, 119 S. Ct. 1167, 1176 (1999). The party offering the expert's testimony bears the burden of proving by a preponderance of the evidence that: (1) the expert is qualified; (2) the testimony is relevant to an issue in the case; and (3) the testimony is reliable. Daubert, 113 S. Ct. at 2794-95. See also Pipitone v. Biomatrix, Inc., 288 F.3d 239, 244 (5th Cir. 2002) ("[E]xpert testimony is admissible only if it is both relevant and reliable.").

To be qualified an expert "witness must have such knowledge or experience in [his] field or calling as to make it appear that his opinion or inference will probably aid the trier in his search for truth." United States v. Hicks, 389 F.3d 514, 524 (5th Cir. 2004), cert. denied, 126 S. Ct. 1022 (2006) (quoting United States v.

Bourgeois, 950 F.2d 980, 987 (5th Cir. 1992)). To be relevant the reasoning or methodology underlying the expert's testimony must be applicable to the facts in issue. See Moore v. Ashland Chemical, Inc., 151 F.3d 269, 275 (5th Cir. 1998) (en banc), cert. denied, 119 S. Ct. 1454 (1999). To be reliable the reasoning or methodology underlying the expert's testimony must be scientifically valid. Id. The Fifth Circuit has recognized that Daubert articulated a non-exclusive, list of flexible criteria for determining reliability, including:

(1) whether the expert's theory can be or has been tested; (2) whether the theory has been subject to peer review and publication; (3) the known or potential rate of error of a technique or theory when applied; (4) the existence and maintenance of standards and controls; and (5) the degree to which the technique or theory has been generally accepted in the scientific community.

Id. (citing Daubert, 113 S. Ct. at 2796-97). "The proponent need not prove to the judge that the expert's testimony is correct, but [] must prove by a preponderance of the evidence that the testimony is reliable." Moore, 151 F.3d at 276. See also Guy v. Crown Equipment Corp., 394 F.3d 320, 325 (5th Cir. 2004) ("Although the Daubert analysis is applied to ensure expert witnesses have employed reliable principles and methods in reaching their conclusions, the test does not judge the expert's conclusions themselves.").

B. Defendants' Motions to Exclude

1. Motion to Exclude Opinions and Testimony on Flash Point at Bayway Will Be Denied Without Prejudice

Defendants move to exclude certain expert testimony on flash point at Bayway under Rules 702, 402, and 403 as unreliable, irrelevant, and unduly prejudicial, and for Plaintiff's failure to disclose relied upon theories in its infringement contentions.⁶⁴ Plaintiff responds that its flash point opinions should not be excluded because they were adequately disclosed in its infringement contentions, Defendants' argument is based on an unidentified and unadopted construction of "feedstock," and the court's construction requires flash point to meet the lower limit in Table 2 – not a specific test.⁶⁵ Asserting that "[t]he patent requires the feedstock to comply with ISO 8217 before hydroprocessing, and hydroprocessing begins the moment the feedstock enters the battery limits of the hydrotreating unit, not after initial processing by the unit,"⁶⁶ Defendants reply that opinions of flash point after Drum D-101 should be excluded as not relevant because the patents require compliance with flash point before Drum D-101, the Riazi

⁶⁴Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158, pp. 2, 6, and 17-26.

⁶⁵Plaintiff's Opposition to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 174, pp. 2 and 18-31.

⁶⁶Defendants' Reply in Support of Motion for Partial Summary Judgment of Non-Infringement and Exclusion of Expert Testimony (ECF 158) ("Defendants' Reply in Support of MPSJ and Motion to Exclude"), Docket Entry No. 184, p. 14.

Formula estimates of flash point contradict the only acceptable measurements of flash point, and opinion testimony on the belated Drum D-101 infringement theory should be excluded because it was not timely disclosed.⁶⁷

For the reasons stated above in § II.B.1, the court has addressed Defendants' contention that Magēmā injected and then expanded its Drum D-101 theory following the close of discovery, and concluded that contention is not supported by the court's record. As explained in § II.B.1, Defendants were placed on notice of the relevance of Drum D-101 at least as early as September 22, 2021, when Plaintiff filed its motion to compel production of sample SP4 from after Drum D-101.⁶⁸ The relevance of Drum D-101 was also raised in the initial report of Plaintiff's expert, Dr. James G. Speight, which was served on Defendants on October 7, 2021,⁶⁹ and in Defendants' opposition to Plaintiff's motion to compel.⁷⁰

⁶⁷Id. at 14-19.

⁶⁸Plaintiff Magēmā Technology LLC's Motion to Compel, Docket Entry No. 54, p. 3, and Exhibit A, Docket Entry No. 54-2 (seeking "Feed to Heater" "At suction of Pump P101A, Pump P101B, or Pump P101C"). See also Magēmā Technology LLC's Reply in Support of Its Motion to Compel Physical Samples (ECF No. 54), Docket Entry No. 59, pp. 2-3 (reiterating its request for "Feed to Heater" "At suction of Pump P101A, Pump P101B, or Pump P101C" and identifying that requested sample as "SP4").

⁶⁹Expert Report of Dr. James G. Speight, Exhibit 12 to Defendants' MPSJ and Motion to Exclude, pp. 92-94 ¶¶ 276-78, Docket Entry No.158-12, pp. 5-7.

⁷⁰Defendants' Response in Opposition to Plaintiff's Motion to
(continued...)

Moreover, Dr. Speight was questioned about Drum D-101 during his deposition on January 5, 2022.⁷¹ The record shows that Defendants were not only on notice of the potential relevance of Drum D-101 before fact discovery closed on November 11, 2021, and long before expert discovery closed on June 14, 2022, but also that Defendants successfully opposed Plaintiff's effort to compel production of samples taken after Drum D-101.⁷²

For the reasons stated below in § IV.D.1(b) (2), the court has concluded that whether the flash point of feed to the Bayway hydrotreater exceeds the Table 2 minimum requirement of 140° F for HMFO is a genuine issue of material fact for trial, and that resolution of the parties' dispute over that issue turns on other fact issues that cannot be resolved on summary judgment, including for example, whether Drum D-101 affects the flash point of the Bayway hydrotreater's feed, and whether application of the Riazi Formula yields a reliable estimate of the feed's flash point. Accordingly, the court is not persuaded that opinion testimony on Drum D-101 should be excluded because it is not relevant.

⁷⁰(...continued)
Compel, Docket Entry No. 57, pp. 1, 9-10 (challenging the relevance of sample SP4, Feed to Heater, which was located after Drum D-101).

⁷¹Speight Deposition, pp. 70:10-85:24, 193:16-197:6, Exhibit 15 to Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158-15, pp. 14-19.

⁷²Transcript of November 4, 2021, Motion Hearing, Docket Entry No. 68, p. 23:1-12.

The court's practice is to rule on motions to exclude expert testimony during the course of trial because experts frequently modify their opinions, and at trial counsel often establish more extensive predicates for the experts' testimony. Moreover, the context in which an expert's opinion is offered is necessary to effectively rule on issues of reliability and prejudice. Accordingly, Defendants' motion to exclude certain expert testimony on flash point at Bayway will be denied without prejudice to being reurged during trial.

2. Motion to Exclude Opinions and Testimony on Damages at the Bayway and Wood River Refineries Will Be Denied Without Prejudice

Defendants move to exclude damages testimony based on non-infringing barrels of fuel oil.⁷³ Plaintiff argues that the opinions of its damage expert should not be excluded because a damage expert is required to assume infringement. Citing PalTalk Holdings, Inc. v. Microsoft Corp., No. 2:06-CV-367 (DF), 2009 WL 10677719, *2 (E.D. Tex. March 8, 2009), Plaintiff argues that where apportionment is necessary due to non-infringement, the burden shifts to the defendant to produce data sufficient to calculate that apportionment.⁷⁴ Defendants argue that Magēmā does not contest

⁷³Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158, pp. 2, 6, and 26-29.

⁷⁴Plaintiff's Opposition to Defendants' MPSJ and Motion to (continued...)

that its expert's royalty base is artificially inflated with non-infringing barrels or attempt to show that its expert only seeks damages adequate to compensate for the infringement alleged. Defendants therefore argue that Magēmā has failed to show that its expert's damage opinion is admissible.⁷⁵ Asserting that a damage expert cannot assume that everything produced infringes when that assumption is contrary to the available evidence, and quoting VirnetX, 767 F.3d at 1326, Defendants argue that "presenting evidence to a jury concerning all barrels produced (and thus all associated revenues) 'cannot help but skew the damages horizon for the jury.'" ⁷⁶ Defendants therefore ask the court to exclude the current royalty base or require an adjustment to barrels actually alleged to be infringed.⁷⁷

(a) Additional Law

"Upon a showing of infringement, a patentee is entitled to 'damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.'" ResQNET.com, Inc. v. Lansa, Inc.,

⁷⁴(...continued)
Exclude, Docket Entry No. 174, p. 32.

⁷⁵Defendants' Reply in Support of MPSJ and Motion to Exclude, Docket Entry No. 184, pp. 19-20.

⁷⁶Id. at 20-21.

⁷⁷Id. at 23.

594 F.3d 860, 868 (Fed. Cir. 2010) (per curiam) (quoting 35 U.S.C. § 284). “The burden of proving damages falls on the patentee.” Lucent Technologies, Inc. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009). Courts may “receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.” 35 U.S.C. § 284.

Plaintiff’s expert, W. Christopher Bakewell (“Bakewell”), has adopted the widely accepted “hypothetical negotiation” approach to computing a reasonable royalty, under which he has “attempt[ed] to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before the infringement began.” Lucent Technologies, 580 F.3d at 1324. Bakewell opines that

[t]he appropriate form of a reasonable royalty in this matter is a running royalty, based upon multiplying a reasonable royalty rate by the number of infringing barrels. . . Reasonable royalty damages are based upon an assessment of the incremental value associated with the patent rights.⁷⁸

“[A]ll running royalties have at least two variables: the royalty base and the royalty rate.” Id. at 1339. “When a hypothetical negotiation would have yielded a running royalty, the classic way to determine the reasonable royalty amount is to multiple the royalty base, which represents the revenue generated

⁷⁸Preliminary Expert Report Regarding Damages (“Bakewell Report”), p. 4 ¶ 12, Exhibit 20 to Defendants’ PMSJ and Motion to Exclude, Docket Entry No. 158-20, p. 7.

by the infringement, by the royalty rate, which represents the percentage of revenue owed to the patentee.” Whitserve, LLC v. Computer Packages, Inc., 694 F.3d 10, 27 (Fed. Cir. 2012), cert. denied, 133 S. Ct. 1291 (2013). “The royalty base for reasonable royalty damages cannot include activities that do not constitute patent infringement, as patent damages are limited to those ‘adequate to compensate for the infringement.’” AstraZeneca AB v. Apotex Corp., 782 F.3d 1324, 1343 (Fed. Cir. 2015) (quoting 35 U.S.C. § 284). Absent information necessary to determine an established royalty rate, a reasonable royalty is most “often determined on the basis of a hypothetical negotiation, occurring between the parties at the time that infringement began.” Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1312 (Fed. Cir. 2011). “A comprehensive (but unprioritized and often overlapping) list of relevant factors for a reasonable royalty calculation appears in Georgia-Pacific Corp. v. United States Plywood Corp., 318 F.Supp. 1116, 1120 (S.D.N.Y. 1970).” ResQNET.com, 594 F.3d at 869.

(b) Application of Additional Law the Parties’ Arguments

Magēmā’s damage expert opines that

the evidence shown to date demonstrates that reasonable royalties appropriate to compensate for the alleged infringement of the patents-in-suit is at least approximately \$2.75 per barrel produced, as summarized in the following table:

**Summary of Reasonable Royalties
January 2020 to July 2021**

<u>Refinery</u>	<u>Accused Products (Barrels)</u>	<u>Reasonable Royalty Rate (Per Barrel)</u>	<u>Reasonable Royalties</u>
Bayway	16,808,000	At least \$2.75	\$46,222,000
Wood River	<u>2,954,000</u>	At least \$2.75	<u>\$ 8,124,000</u>
Total	<u>19,762,000</u>		<u>\$54,346,000</u> ⁷⁹

In pertinent part Bakewell notes that “the calculations in this report can accommodate different volumes of infringing products.”⁸⁰ Bakewell explains that the “royalty base” “is the LSFO [low sulfur fuel oil] produced by Phillips using the accused hydrotreater process. The royalty base is estimated through July 2021, and it can be adjusted . . . to account for damages ‘adequate to compensate for infringement.’”⁸¹

Asserting that Magēmā only identifies a small fraction of Wood River operations that comply with CCAI, which is required for infringement, but nevertheless offers damage opinions applying a royalty rate to every barrel of material hydroprocessed at that refinery, Defendants argue that “Magēmā must apportion its damages between infringing and non-infringing operations or otherwise have the damage opinions excluded.”⁸² In support of this argument

⁷⁹Id. ¶ 13.

⁸⁰Id. n. 8.

⁸¹Id. at 67 ¶ 220 (quoting 35 U.S.C. § 284), Docket Entry No. 158-20, p. 12.

⁸²Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 158, p. 26.

Defendants cite VirnetX, 767 F.3d at 1326, which concerned the general rule that a patentee seeking damages based on an infringing product containing both patented and unpatented features must "apportion damages only to the patented features." 767 F.3d at 1329. VirnetX does not appear applicable to the facts of this case because there are neither allegations nor evidence that the accused infringing products contain both patented and unpatented features. Defendants' motion to exclude opinions of Plaintiff's damage expert rests on assertions that Plaintiff has no evidence that all of the low sulfur HMFO produced at either the Bayway or the Wood River refineries infringes the Asserted Patents. But whether the low sulfur HMFO produced at either refinery infringes the Asserted Patents are questions of fact for trial.

Defendants' argument with respect to the low sulfur HMFO produced at the Bayway refinery is based on its motion to exclude testimony of flash point, which for the reasons stated above in § III.B.1, the court has denied without prejudice to being reurged at trial. Accordingly, Defendants' motion to exclude expert testimony as to damages at the Bayway refinery will also be denied without prejudice to being reurged at trial.

Defendants' argument with respect to the low sulfur HMFO produced at the Wood River refinery is based on Defendants' contention that Plaintiff has failed to cite evidence capable of establishing that more than a minimal amount of the low sulfur HMFO

produced there infringes by meeting the ISO 8217 Table 2 requirement for CCAI. Whether the low sulfur HMFO produced at the Wood River refinery infringes, and if so, how much of that HMFO infringes are genuine issues of material fact for trial on which Plaintiff bears the burden of proof. The court is therefore not persuaded that the damage opinions of Plaintiff's expert should be excluded before trial. See Avid Identification Systems, Inc. v. Global ID Systems, 29 F. App'x 598, 602 (Fed. Cir. 2002) (per curiam) ("The burden of proof on the number of infringing [items] used or sold by [Defendants] . . . was on the plaintiff, and it was inappropriate for the district court to shift that burden to the defendant."). Accordingly, Defendants' motion to exclude expert testimony as to damages at the Bayway refinery will also be denied without prejudice to being reurged at trial.

C. Plaintiff's Motions to Exclude and Strike

1. The Motion to Exclude the Opinions of Edward Sughrue Will Be Denied Without Prejudice to Reurging at Trial

Plaintiff seeks to exclude the opinions of Dr. Sughrue by arguing that they are inconsistent with the court's construction of the claim term HMFO and with Defendants' invalidity contentions, he is not qualified to opine on invalidity and noninfringement, and his invalidity opinions are unreliable and unhelpful.⁸³ Defendants respond that Sughrue's opinions should not be excluded because they

⁸³Plaintiff's Corrected Motion to Exclude Dr. Sughrue, Docket Entry No. 163, pp. 2, 13-25.

are consistent with the court's claim construction and with Defendants' invalidity contentions, Sughrue is qualified to offer opinions on invalidity and infringement, and Sughrue's opinions are reliable and helpful.⁸⁴

As stated above in § III.B.1, the court's practice is to rule on motions to exclude expert testimony during the course of trial because experts frequently modify their opinions, and at trial counsel often establish more extensive predicates for the experts' testimony. Moreover, the context in which an expert's opinion is offered is necessary to effectively rule on such issues. Accordingly, Plaintiff's motion to exclude the opinions of Dr. Sughrue will be denied without prejudice to being reurged during trial.

2. The Motion to Strike the Opinions of Thomas Britven Will Be Denied as Moot Without Prejudice

Plaintiff moves to strike all opinions in the report of Defendant's damages expert Thomas Britven that rely on the lay opinions of Dennis Vauk ("Vauk"), Phillip's Director of Hydroprocessing, and interviews with Frank Eymard ("Eymard"), Phillip's in-house counsel.⁸⁵ Plaintiff argues that Britven's reasonable royalty opinions should be stricken because they rely on

⁸⁴Defendants' Response in Opposition to Plaintiff's Corrected Motion to Exclude the Opinions and Testimony of Defendants' Technical Expert Edward L. Sughrue II, Ph.D., Docket Entry No. 178, pp. 2, and 7-23.

⁸⁵Plaintiff's Motion to Strike Defendants' Expert Britven, Docket Entry No. 155, p. 5.

opinions of Vauk, who has not been designated as an expert witness and whose opinions are not the type of lay witness testimony permitted by Federal Rule of Evidence 701,⁸⁶ and licensing information provided by Eymard, who has not been deposed because of Defendants' privilege claim.⁸⁷ Defendants respond that Plaintiff has presented no compelling reason to exclude Birtven's opinions that rely upon licensing-related information received from Vauk and/or Eymard.⁸⁸ Because the court has been able to resolve the other pending motions without relying on those portions of the Britvan report that rely on either the lay opinions of Vauk or interviews with Eymard, Plaintiff's motion to strike will be denied as moot without prejudice to being reurged during trial.

3. The Motion to Strike the Declaration of John Allen Will Be Denied as Moot Without Prejudice

In the reply brief that Plaintiff has filed in support of its motion for partial summary judgment Plaintiff argues that the Declaration of John Allen attached to Defendant's Response in Opposition to Plaintiff's MPSJ "must be struck because it is not based on his personal knowledge alone. Rather it is 'based upon . . . the knowledge of Phillips 66.'"⁸⁹ Plaintiff also argues that

⁸⁶Id. at 8-10.

⁸⁷Id. at 11-12.

⁸⁸Defendants' Response in Opposition to Plaintiff's Motion to Strike Certain Opinions of Defendants' Damages Expert Thomas Britven, Docket Entry No. 171, pp. 6-7.

⁸⁹Plaintiff's Reply in Support of MPSJ and Application of 35
(continued...)

to the extent that Mr. Allen draws technical conclusions from the proffered facts, his declaration also constitutes an untimely lay opinion. At a minimum, such undisclosed lay opinion [should] be struck under Federal Rule of Civil Procedure 26(a)(2)(B) and (C), and therefore, should be refused consideration.⁹⁰

Because the court has been able to resolve the other pending motions without relying on the Declaration of Thomas Allen, Plaintiff's motion to strike that declaration will be denied as moot without prejudice to being reurged during trial should Mr. Allen be called to testify.

IV. Cross Motions for Partial Summary Judgment

Plaintiff moves for partial summary judgment that the Bayway DSU-1 hydrotreater's feed and product satisfy an important element found in all asserted patent claims, i.e., the flashpoint requirement of Table 2.⁹¹ Plaintiff also moves to invoke 35 U.S.C. § 295 to establish a presumption of infringement, thereby shifting the burden of proving non-infringement to Defendants for both the Bayway and Wood River Refineries.⁹² Defendants move for partial summary judgment of non-infringement for its accused Bayway refinery.⁹³ For the reasons stated below, Plaintiff's MPSJ that the

⁸⁹ (...continued)
U.S.C. § 295, Docket Entry No. 192, p. 11.

⁹⁰Id.

⁹¹Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, pp. 2, 7-9, and 21-24.

⁹²Id. at 2, 9, and 24-30.

⁹³Defendants' MPSJ and Motion to Exclude, Docket Entry No. 158,
(continued...)

Bayway DSU-1 hydrotreater's feed satisfies the flash point requirement of Table 2 will be denied, Plaintiff's MPSJ that the Bayway DSU-1 hydrotreater's product satisfies the flashpoint requirement of Table 2 will be granted, and Plaintiff's motion to invoke 35 U.S.C. § 295 to establish a presumption of infringement will be denied; Defendant's MPSJ of non-infringement for its accused Bayway refinery will be denied.

A. Standard of Review

Summary judgment is authorized if the movant establishes that there is no genuine dispute about any material fact and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). Rule 56 authorizes a court to grant "partial summary judgment" to dispose of less than the entire case and even just portions of a claim or defense. See Fed. R. Civ. P. 56 Advisory Committee's Note, 2010 Amendments. Disputes about material facts are genuine if the evidence is such that a reasonable jury could return a verdict for the nonmoving party. Anderson v. Liberty Lobby, Inc., 106 S. Ct. 2505, 2511 (1986). "The party moving for summary judgment must 'demonstrate the absence of a genuine issue of material fact,' but need not negate the elements of the nonmovant's case." Little v. Liquid Air Corp., 37 F.3d 1069, 1075 (5th Cir. 1994) (en banc) (per curiam) (quoting Celotex Corp. v. Catrett, 106

⁹³(...continued)
pp. 6 and 15-17.

S. Ct. 2548, 2553 (1986)). "If the moving party fails to meet this initial burden, the motion must be denied, regardless of the nonmovant's response." Id. If, however, the moving party meets this burden, "the nonmovant must go beyond the pleadings and designate specific facts showing that there is a genuine issue for trial." Id. Factual controversies are to be resolved in favor of the nonmovant, "but only when there is an actual controversy, that is, when both parties have submitted evidence of contradictory facts." Id. The court will not, "in the absence of any proof, assume that the nonmoving party could or would prove the necessary facts." Id. "[T]he court must draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence." Reeves v. Sanderson Plumbing Products, Inc., 120 S. Ct. 2097, 2110 (2000).

"When parties file cross-motions for summary judgment, [courts] review 'each party's motion independently, viewing the evidence and inferences in the light most favorable to the nonmoving party.'" Cooley v. Housing Authority of the City of Slidell, 747 F.3d 295, 298 (5th Cir. 2014) (quoting Ford Motor Co. v. Texas Department of Transportation, 264 F.3d 493, 498 (5th Cir. 2001)). See also Shaw Constructors v. ICF Kaiser Engineers, Inc., 395 F.3d 533, 538-39 (5th Cir. 2004), cert. denied sub nom. PCS Nitrogen Fertilizer, L.P. v. Shaw Constructors, Inc., 126 S. Ct. 342 (2005) ("Cross-motions must be considered separately, as each

movant bears the burden of establishing that no genuine issue of material fact exists and that it is entitled to judgment as a matter of law.”). If the dispositive issue is one on which the moving party will bear the burden of proof at trial, the moving party “must come forward with evidence which would ‘entitle it to a directed verdict if the evidence went uncontroverted at trial.’” International Shortstop, Inc. v. Rally’s, Inc., 939 F.2d 1257, 1264-65 (5th Cir. 1991), cert. denied, 112 S. Ct. 936 (1992). See also Anderson, 106 S. Ct. at 2511 (“[The] standard [for granting summary judgment] mirrors the standard for a directed verdict under Federal Rule of Civil Procedure 50(a).”). The nonmoving party can then defeat the motion by countering with sufficient evidence of its own, or by “showing that the moving party’s evidence is so sheer that it may not persuade the reasonable fact-finder to return a verdict in favor of the moving party.” Id. at 1265. If the dispositive issue is one on which the nonmoving party will bear the burden of proof at trial, the moving party may satisfy its burden by merely pointing out that the evidence in the record is insufficient with respect to an essential element of the nonmoving party’s claim. See Celotex, 106 S. Ct. at 2552-53. The burden then shifts to the nonmoving party, who must, by submitting or referring to evidence, set out specific facts showing that a genuine issue exists. Id. at 2553. The nonmovant may not rest upon the pleadings, but must identify specific facts that establish a genuine issue for trial. Id. See also Little, 37 F.3d at 1075.

B. Applicable Law

Evaluation of a motion for summary judgment of infringement or non-infringement is a two-step process. See Abbott Laboratories v. Sandoz, Inc., 566 F.3d 1282, 1288 (Fed. Cir. 2009), cert. denied sub nom. Astellas Pharma, Inc. v. Lupin Ltd., 130 S. Ct. 1052 (2010). First, the claims are properly construed and second, the construed terms are compared to the accused product or method. Id. “[A] determination of noninfringement, either literal or under the doctrine of equivalents, is a question of fact.” Crown Packaging Technology, Inc. v. Rexam Beverage Can Co., 559 F.3d 1308, 1312 (Fed. Cir. 2009). To infringe a claim literally, the accused product must incorporate every limitation in a valid claim, exactly. Zodiac Pool Care, Inc. v. Hoffinger Industries, Inc., 206 F.3d 1408, 1415 (Fed. Cir. 2000) (“Absent any limitation of a patent claim, an accused device cannot be held to literally infringe the claim.”). To infringe a claim under the doctrine of equivalents, the accused product must incorporate every limitation in a valid claim by a substantial equivalent. Id. As with literal infringement, there can be no infringement under the doctrine of equivalents if one limitation of a claim is not present in the accused device. Id. See also Crown Packaging, 559 F.3d at 1312 (“A finding of infringement under the doctrine of equivalents requires a showing that the difference between the claimed invention and the accused product was insubstantial.”). “[A]

determination of noninfringement, either literal or under the doctrine of equivalents, is a question of fact.” Crown Packaging, 559 F.3d at 1312. The court may grant summary judgment of infringement or non-infringement only if no reasonable jury could find otherwise. Id.

C. Defendants’ Motion for Partial Summary Judgment

Defendants move for partial summary judgment of non-infringement for the accused Bayway refinery.⁹⁴ Defendants argue that they are entitled to partial summary judgment of noninfringement for the Bayway refinery because

[i]n its claim construction order, this Court recognized that claim term “[HMFO]” is a residual fuel oil that is defined as including process residues that are ‘the fractions that don’t boil or vaporize even under vacuum conditions.’ The feedstock at Bayway, however, consists entirely of material that has been previously boiled and vaporized, meaning that [it] cannot be a residual or [HMFO] as required for infringing of the patents.⁹⁵

Asserting that “construing HMFO as fuel with ‘fractions that don’t boil or vaporize even under vacuum conditions’ renders infringement impossible at Bayway because Phillips 66 hydroprocesses a distillate feedstock that has been completely boiled or vaporized,”⁹⁶ Defendants argue that

⁹⁴Id.

⁹⁵Id. at 15.

⁹⁶Id. at 16.

Magēmā has never argued that the feedstock into the Bayway hydrotreater contains fractions that do not boil or vaporize even under vacuum conditions. Instead, Magēmā argues the feed contains “process residues” by using creative definitions of residues not supported by its patents. . . . But none of these proposed arguments address whether the feedstock contains “fractions that don’t boil even at vacuum conditions.” . . . Accordingly, Magēmā cannot raise a fact issue as to infringement of any asserted claim when the Court properly construes HMFO to include “fractions that do not boil or vaporize even under vacuum conditions.”⁹⁷

Plaintiff responds that “this Court rejected [Defendants’] attempt to import a limitation from the specification to narrow the claimed [HMFO] to only process residues that ‘do not boil or vaporize even under vacuum conditions,’ ”⁹⁸ and that Defendants’ “only argument is that there is no ‘fact issue as to infringement of any asserted claim when the Court properly construes HMFO.’ ”⁹⁹ Plaintiff argues that Defendants’ MPSJ fails because it requests an untimely claim construction “do-over” that “hinges entirely on their previously-rejected construction,”¹⁰⁰ and because Magēmā has proffered opinions and evidence that the Bayway feed does, in fact, include process residues.¹⁰¹ Plaintiff also argues that “[n]ew constructions would likely require further discovery and expert disclosures, resulting in further delay of trial.”¹⁰²

⁹⁷Id. at 17.

⁹⁸Plaintiff’s Opposition to Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 174, p. 8.

⁹⁹Id. (quoting Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 158, p. 17).

¹⁰⁰Id.

¹⁰¹Id. at 9.

¹⁰²Id.

Defendants reply that the patents limit the invention to fuels with fractions that don't boil or vaporize, and that they raise this dispute now because the court has a continuing obligation to address claim construction as a matter of law before submitting the case to the jury. Defendants also reply that Plaintiff has failed to raise a fact issue as to whether the Bayway feed has fractions that don't boil or vaporize even under vacuum conditions.¹⁰³

1. Additional Construction of the Term "HMFO" is Not Needed

As recognized in the court's July 28, 2021, Memorandum Opinion and Order, Plaintiff has long argued that the products being processed by Defendants qualify as HMFO as long as they meet the minimum physical property requirements for ISO 8217 residual marine fuels. Defendants have long disagreed, arguing instead that "[HMFO]" should be limited to residual marine fuels that contain process residues," i.e., fractions that do not boil or vaporize even under vacuum conditions. Magēmā, 2021 WL 3186532, *6 (recognizing Defendants' contention that "the dispute between the parties is whether the claimed '[HMFO]' must contain any process residues, because Magēmā accuses distillates that contain no process residues"). The court heard and considered the parties' arguments on this issue at the July 8, 2021, Markman hearing. On

¹⁰³Defendants' Reply in Support of MPSJ and Motion to Exclude, Docket Entry No. 184, pp. 6-13.

July 28, 2021, the court issued a Markman Order holding that “HMFO” means “[a] petroleum product fuel compliant with the ISO 8217:2017 standards for bulk properties of residual marine fuels except for the concentration levels of the Environmental Contaminates.” Magēmā, 2021 WL 3186532, *7 and *16. The court’s holding necessarily rejected Defendants’ alternative constructions of “[a] fuel oil containing a majority of process residue that does not boil or vaporize even at vacuum conditions,” or “[a] marine fuel oil containing a substantial amount of process residue that has not boiled or vaporized even at vacuum conditions.” Id. at 5.

Acknowledging that the court’s construction of “HMFO” is not tied to unboiled fractions, and asserting that the court may revisit claim construction during summary judgment,¹⁰⁴ Defendants argue that the court “apparently agrees that the term [‘HMFO’] was limited to fuels with fractions that do not boil or vaporize.”¹⁰⁵ In support of this argument Defendants cite the following language from the court’s Markman order:

While the specifications do use “[HMFO]” interchangeably with residual-based fuel oil, and residual based fuel oil is defined in the ‘884 and ‘287 Patents as a mixture of process residues, which are defined in turn as “the fractions that don’t boil or vaporize even under vacuum conditions,” Defendants fail to cite any language in the specifications that requires “heavy marine fuel oil” to contain either a “majority” or a “substantial amount” of

¹⁰⁴Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 158, p. 16.

¹⁰⁵Id. at 15.

process residues that do not boil or vaporize even at vacuum conditions.¹⁰⁶

Plaintiff responds that “[t]he single sentence in the Order on which Phillips has based its obstinate refusal to apply the Court’s adopted claim construction . . . is nothing more than an acknowledgment of the background description in the patent specifications.”¹⁰⁷ Asserting that they are “not seeking a ‘reversal of the prior adopted construction,’ ”¹⁰⁸ and acknowledging that “[t]he Court adopted a definition of ‘HMFO’ that is expressly stated in the patents and technically correct,”¹⁰⁹ Defendants reply:

The construction is not wrong, but is also not useful here. . . [T]he definition does not address the dispute between the parties as to the scope of the invention. Specifically, the construction does not address one way or the other whether distillate materials that have completely boiled and vaporized can be considered a heavy marine fuel oil. The court has a continuing obligation to address disputes over the meaning of claim terms as a matter of law.¹¹⁰

As acknowledged by the court’s Markman order, Defendants’ proposed constructions for the term “HMFO” have changed over time.

¹⁰⁶Id. (quoting Magēmā, 2021 WL 3186532, at *8).

¹⁰⁷Plaintiff’s Opposition to Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 174, p. 14.

¹⁰⁸Defendants’ Reply in Support of MPSJ and Motion to Exclude, Docket Entry No. 184, p. 7 (quoting Plaintiff’s Opposition to Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 174, p. 12).

¹⁰⁹Id.

¹¹⁰Id.

Defendants' initially argued that the term "HMFO" should be construed to mean "[a] fuel oil containing a majority of process residue that does not boil or vaporize even at vacuum conditions," and later argued that "HMFO" should be construed to mean "[a] marine fuel oil containing a substantial amount of process residue that has not boiled or vaporized even at vacuum conditions." Magēmā, 2021 WL 3186532, *5. The Markman Order also acknowledged Defendants' contention that "the dispute between the parties is whether the claimed '[HMFO]' must contain any process residues, because Magēmā accuses distillates that contain no process residues." Id. at *6. After carefully considering all of the parties' written and oral arguments, and the applicable law, the court rejected Defendants' arguments that "HMFO" be construed in terms of process residues that do not boil or vaporize even under vacuum conditions in favor of Plaintiff's argument that "HMFO" be construed to mean "[a] petroleum product fuel compliant with the ISO 8217:2017 standards for bulk properties of residual marine fuels except for the concentration levels of the Environmental Contaminates." Magēmā, 2021 WL 3186532, at *7 and *16.

In pertinent part the court explained that Defendants' arguments were not persuasive because the patent claims

consistently define[] "[HMFO]" as ISO 8217 residual marine fuels, i.e., fuels that are defined in ISO 8217 Table 2, titled "Residual marine fuels," as opposed to Table 1, titled "Distillate marine fuels," and because ISO Table 2 does not require "Residual marine fuels" to contain either a "majority" or a "substantial" amount of

process residues. To the contrary, **Table 2 does not define residual marine fuels by their components but, instead, by objective physical characteristics . .**

Id. at *7 (emphasis added). Now, months after the court issued the Markman Order, Defendants argue the court's statement that "'Table 2 does not define residual marine fuels by their components,' misses the mark because the real issue at hand is whether the **patents** (not Table 2) define residual marine fuels by its components."¹¹¹ But missing from Defendants' arguments, either during the claim construction phase of this litigation or now, is a cite to any claim language that requires HMFO to contain process residue that does not boil or vaporize even under vacuum conditions. Moreover, for the reasons stated in the Markman Order, the court declined to construe "HMFO" in terms of components as argued by Defendants, and, instead, construed "HMFO" in terms of physical properties as defined by ISO 8217:2017 Table 2, as argued by Plaintiff. Maqēmā, 2021 WL 3186532, at *5-*11.

The court's statement that

the specifications do use "[HMFO]" interchangeably with residual-based fuel oil, and residual based fuel oil is defined in the '884 and '287 Patents as a mixture of process residues, which are defined in turn as "the fractions that don't boil or vaporize even under vacuum conditions,"

id. at *8, merely recites a description in the specifications. That recitation is followed by the court's acknowledgment that

¹¹¹Id. at 9.

Defendants recognize,

Magēmā expressly defines both the feed and product “[HMFO]” of its patented invention as “a residual petroleum product”:

Feedstock [HMFO] is a residual petroleum product
compliant with the ISO 8217 standards for the physical properties or characteristics of a merchantable HMFO . .

Product HMFO is a residual petroleum product based fuel
compliant with the ISO 8217 standards for the properties or characteristics of a merchantable HMFO . . .

Id. at 9. The court then stated that

[t]he language cited by Defendants shows that the defining characteristic of the term “[HMFO]” as used in the patents-in-suit is a residual petroleum product compliant with the ISO 8217 standards for the physical properties or characteristics of a merchantable HMFO. The ISO 8217 standards for residual marine fuels are set forth in ISO 8217 Table 2, which do not include the requirement urged by Defendants, i.e., that residual marine fuels contain either a majority or a substantial amount of process residues that do not boil or vaporize even at vacuum conditions. Accordingly, the court is not persuaded that the patents’ specifications support the Defendants’ proposed construction.

Id. See also id. n. 39 (considering and rejecting Defendants’ “process residues” argument based on standards other than ISO 8217). Because Defendants acknowledge that “[t]he [court’s] construction [of HMFO] is not wrong,”¹¹² and because Defendants fail to cite any claim language that requires HMFO to contain process residue that does not boil or vaporize even at vacuum conditions, the court is not persuaded that the term “HMFO” needs any additional construction.

¹¹²Id. at 7.

2. Defendant Is Not Entitled to Partial Summary Judgment of No Infringement for the Bayway Refinery

Asserting that “Magēmā has never argued that the feedstock into the Bayway hydrotreater contains fractions that do not boil or vaporize even under vacuum conditions,”¹¹³ Defendants argue that “Magēmā cannot raise a fact issue as to infringement of any asserted claim when the Court properly construes HMFO to include ‘fractions that do not boil or vaporize even under vacuum conditions.’”¹¹⁴ For the reasons explained in the preceding section of this Memorandum Opinion and Order, the court declines Defendants’ invitation to revise the construction of HMFO to include fractions that do not boil or vaporize even under vacuum conditions. Defendants are therefore not entitled to summary judgment based on the assertion that “Magēmā has never argued that the feedstock into the Bayway hydrotreater contains fractions that do not boil or vaporize even under vacuum conditions.”¹¹⁵ Whether the feedstock into the Bayway hydrotreater is an HMFO as construed by the court is a fact issue for trial. Accordingly, the court concludes that Defendants are not entitled to partial summary judgment of non-infringement for the accused Bayway refinery.

¹¹³Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 158, p. 17.

¹¹⁴Id. See also Defendants’ Reply in Support of MPSJ and Motion to Exclude, Docket Entry No. 184, p. 11 (“Magēmā fails to raise an issue of fact as to whether the Bayway fuel has fractions that don’t boil or vaporize even under vacuum conditions.”).

¹¹⁵Defendants’ MPSJ and Motion to Exclude, Docket Entry No. 158, p. 17.

D. Plaintiff's Motion for Partial Summary Judgment

Plaintiff seeks partial summary judgment that the Bayway DSU-1 hydrotreater's feed and product satisfy an important element found in all the asserted patents, i.e., that they meet all sixteen of the physical properties for HMFO established by ISO 8217 Table 2. Plaintiff also seeks an order shifting the burden of proving non-infringement to Defendants under 35 U.S.C. § 295.

Defendants respond that Plaintiff is not entitled to partial summary judgment that the Bayway feed and product infringe because they have raised genuine disputes of material fact as to whether the Bayway material contains process residues – a requirement that Defendants argue is needed to infringe the Asserted Claims.¹¹⁶ Alternatively, Defendants respond that they have raised a fact dispute as to the flash point of the Bayway feed through flash point measurements, testimony, and expert opinions,¹¹⁷ but do not dispute that the flash point of the Bayway product meets the requirements of HMFO under the court's claim construction. Defendants ask the court to deny Plaintiff's request to presume infringement because 35 U.S.C. § 295 does not apply to the facts of this case.¹¹⁸

¹¹⁶Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 176, p. 6.

¹¹⁷Id.

¹¹⁸Id.

1. The Bayway Hydrotreater's Feed and Product

Stating that "[e]very asserted claim of Magēmā's patents requires both a feed and product that constitutes a [HMFO] compliant with ISO 8217 Table 2,"¹¹⁹ and that "Table 2 sets forth requirements for 16 physical properties that must be met for a material to be compliant,"¹²⁰ Plaintiff argues that Defendants

now concede[] that the Bayway product complies with each of those Table 2 requirements. Yet Phillips will not agree that the Bayway Product satisfies this element of the asserted patents, based solely on its continued reliance upon a claim construction that it proposed and lost. Because this only remaining dispute must be rejected as contrary to the construction adopted by the Court, partial summary judgment that the Bayway Product satisfies this element is appropriate and would significantly streamline the issues for trial.¹²¹

Plaintiff argues that

[r]elatedly, Phillips also now concedes that the Bayway Feed satisfies each of the Table 2 requirements, except one: flashpoint. Magēmā's technical expert uses a well-established industry standard for estimating flashpoints (the Riazi Formula). Those calculations show the flashpoint of the Bayway Feed complies with Table 2.

Magēmā relies on the Riazi Formula because Phillips refused to produce physical samples representative of the complete hydrocarbon stream that is hydroprocessed. Instead, Phillips produced representative physical samples taken upstream. Phillips unrepresentative, upstream samples excludes hydrocarbons that form part of the feed that is hydroprocessed and includes volatile hydrocarbons that are removed prior to hydroprocessing by the "vapor disengaging drum," D-101. Nonetheless,

¹¹⁹Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, p. 7.

¹²⁰Id.

¹²¹Id.

Phillips purposefully chose this upstream sample location, knowing the volatile hydrocarbons lower the flashpoint of a sample. Magēmā filed a motion to compel representative samples, which was denied based – at least in part – on Phillips assurances that the data and information that it produced would be sufficient, thus rendering the requested samples superfluous.

. . .

Magēmā maintains that the Riazi calculations are sufficient to prove the Bayway Feed satisfies the flashpoint requirement of Table 2, and thus warrants summary judgment as to the disputed claim term. . . Defendants have no evidence (estimations or actual D93 tests) establishing the flashpoint of the feed, apart from irrelevant testing conducted on unrepresentative upstream samples. Consequently, summary judgment as to the Bayway feed should also be granted.¹²²

Plaintiff argues that it is therefore entitled to partial summary judgment that the Bayway Hydrotreater's feed and product satisfy all the requirements of Table 2.¹²³

- (a) Evidence that Neither the Feed Nor the Product of Defendants' Hydrotreaters Contain Process Residues or Fractions that Do Not Boil or Vaporize Even Under Vacuum Conditions Does Not Create a Genuine Issue of Material Fact for Trial

Asserting that "Phillips 66 boils and vaporizes its entire feedstock before entering the Bayway hydrotreater,"¹²⁴ Defendants argue that Plaintiff cannot establish infringement over operations at the . . . Bayway refinery . . . [because] the patent claims as

¹²²Id. at 7-9.

¹²³Id. at 21-24. See also Plaintiff's Reply in Support of MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 192, pp. 6-10.

¹²⁴Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 176, p. 9.

properly construed as a matter of law are limited to fuels with [process residues, i.e.,] 'fractions that do not boil or vaporize even under vacuum conditions.'" ¹²⁵ Defendants argue that because "Bayway hydroprocesses a distillate fuel that has been completely boiled and vaporized, [] it cannot infringe as a matter of law."¹²⁶

For the reasons explained above in §§ II and IV.C.1, the court has declined Defendants' invitation to revise the construction of HMFO to include process residues or fractions that do not boil or vaporize even under vacuum conditions, and for the reasons explained above in § IV.C.2 the court has concluded that Defendants' MPSJ of noninfringement should be denied on that basis. Because the court has construed HMFO to mean "[a] petroleum product fuel compliant with the ISO 8217:2017 standards for bulk properties of residual marine fuels except for the concentration levels of the Environmental Contaminates," Magēmā, 2021 WL 3186532, at *7 and *16, and because under that construction Plaintiff does not need to establish that the Bayway hydrotreater's feed or product include process residues or fractions that do not boil or vaporize even under vacuum conditions, evidence that Defendants do not hydroprocess a fuel with process residues or fractions that do not boil or vaporized even under vacuum conditions, does not create a genuine dispute of material fact for trial as to infringement.

¹²⁵Id. at 10.

¹²⁶Id. at 10-11.

(b) Flash Point Requirement

- (1) Plaintiff Is Entitled to Partial Summary Judgment that the Bayway Hydrotreater's Product is a Table 2 Compliant HMFO

Asserting that Defendants' Bayway product is a Table 2 compliant HMFO, Plaintiff argues that it is entitled to summary judgment that the Bayway product satisfies the Table 2 flash point requirement.¹²⁷ Defendants do not dispute that the Bayway product meets the Table 2 requirements for flash point.¹²⁸ Accordingly, Plaintiff is entitled to partial summary judgment that the Bayway hydrotreater's product is a Table 2 compliant HMFO.

- (2) Whether the Bayway Hydrotreater's Feed is a Table 2 Compliant HMFO is a Genuine Dispute of Material Fact for Trial

Asserting that Defendants do not dispute that the Riazi Formula used by Plaintiff's expert, Dr. Speight, to calculate the flash point for the Bayway feed show that the feed flash point is greater than 140° F, and that Defendants' expert, Dr. Sughrue, agrees that the Riazi Formula correctly estimates the D93

¹²⁷Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, pp. 21-22.

¹²⁸See Stipulation Regarding ISO 8217 Characteristics, Docket Entry No. 125, pp. 1-2 ("Defendants [] stipulate that they will not dispute the allegations of infringement for the patent claims identified in plaintiff's Final Infringement Contentions as related to ISO 8217 based on the following: . . . 4. Meeting the limits of the characteristics of flash point and sulfur as required by ISO 8217:2017 for residual marine fuels (Table 2) for the product of the DSU-1 hydrotreater at the Bayway refinery[.]").

flashpoint results of the Bayway product,¹²⁹ Plaintiff argues that the Riazi Formula provides an appropriate estimation of the flash point for the Bayway feed.¹³⁰ Plaintiff argues that Defendants' contention that the Riazi Formula does not accurately estimate the flash point for the Bayway feed is wrong

because Dr. Sughrue relies on an incorrect assumption that the relevant point for determining the flashpoint of the feed is upstream of D-101, he is able to ignore the fact that D-101 removes the vapors that, according to him, confound the Riazi calculations.¹³¹

Plaintiff argues that

Dr. Sughrue relies on D93 testing of the flashpoint of Upstream Samples collected **before** [] the vapor disengaging drum (D-101). [] The Upstream Samples are missing the recycle stream, which has a flashpoint greater than 210° F. [] Importantly, the Upstream Samples necessarily still include the volatile hydrocarbons that D-101 removes (disengages) as vapor prior to hydroprocessing in the reactor. [] In short, the Upstream Samples are measuring the wrong material: D-101 and the addition of the recycle stream both impact flashpoint. The proper point to measure and/or calculate flashpoint is once the hydrocarbon stream that is hydroprocessed is completely composed, and before the addition of the hydrogen activating gas, which directly precedes hydroprocessing in the reactors. It is important to recognize that flashpoint is not a linearly calculated property, [] such that it could be established through reliance on the upstream samples. One cannot merely "average" the flashpoints of consistent components to estimate the flashpoint of the combination. It isn't that simple. Hence the need for formulas such as the Riazi Formula, which is far more sophisticated, to

¹²⁹Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, p. 22.

¹³⁰Id. at 23.

¹³¹Id.

estimate flashpoint. Because Dr. Sughrue's Upstream Samples are not representative of – of indicative of – the flashpoint of the feed that is hydroprocessed insofar as it excludes the recycle portion of the feed and includes hydrocarbons that are removed from the feed prior to hydroprocessing, [] the flashpoint of these Upstream Samples do not create a genuine issue of material fact. Consequently, partial summary judgment that the Bayway feed meets this key element is proper.¹³²

Asserting that they have produced hundreds of flash point measurements falling below the required minimum, Defendants argue that Plaintiff's motion for partial summary judgment regarding the feed to the Bayway hydrotreater should be denied.¹³³ Defendants argue that Plaintiff's reliance on expert opinions that Drum D-101 removes light hydrocarbons and raises the flash point of the feed cannot meet the burden for summary judgment because "(1) the effect of drum D-101 on the feedstock is irrelevant to the issue of infringement and (2) competing expert and factual testimony raises a fact issue as to whether drum D-101 affects the flash point."¹³⁴

Citing inter alia the opinions of its expert, Dr. Speight, Plaintiff has presented evidence from which a reasonable jury could conclude that the flash point of feed to the Bayway hydrotreater exceeds the Table 2 minimum requirement of 140° F for HMFO.¹³⁵

¹³²Id. at 23-24. See also Plaintiff's Reply in Support of MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 192, pp. 11-18.

¹³³Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 176, p. 16.

¹³⁴Id.

¹³⁵Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket (continued...)

Citing inter alia the opinions of its expert, Dr. Sughrue, Defendants have presented evidence from which a reasonable jury could reach a contrary conclusion.¹³⁶ Resolution of this dispute turns on numerous other fact questions, including for example, whether Drum D-101 affects the flash point of the Bayway hydrotreater's feed, and whether application of the Riazi Formula yields a reliable estimate of the feed's flash point. These fact issues cannot be resolved on summary judgment and must, instead, be resolved by a jury at trial.

2. Plaintiff's Request to Shift the Burden of Proof to Defendants under 35 U.S.C. § 295 Will Be Denied

Asserting a substantial likelihood exists that Defendants' infringe the patented processes, and that it made a reasonable effort to determine the processes actually used but was unable to do so, Plaintiff argues that it is entitled to a presumption of infringement under 35 U.S.C. § 295, thereby shifting the burden of proving non-infringement to Defendants for both the Bayway and Wood River Refineries.¹³⁷ Plaintiff argues that its technical expert

¹³⁵ (...continued)
Entry No. 161, pp. 22-24; Plaintiff's Reply in Support of MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 192, pp. 11-18 (and exhibits cited therein).

¹³⁶ Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 176, pp. 16-23 (and exhibits cited therein).

¹³⁷ Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket (continued...)

relies on the Riazi Formula for estimating flashpoints “because [Defendants] refused to produce physical samples representative of the complete hydrocarbon stream that is hydroprocessed.”¹³⁸

Plaintiff argues that Defendants

produced unrepresentative physical samples taken upstream. [Defendants’] unrepresentative, upstream samples exclude[] hydrocarbons that form part of the feed that is hydroprocessed and include[] volatile hydrocarbons that are removed prior to hydroprocessing by the “vapor disengaging drum,” D-101. Nonetheless, [Defendants] purposefully chose this upstream sample location, knowing the volatile hydrocarbons lower the flashpoint of a sample. Magēmā filed a motion to compel representative sample, which was denied based – at least in part – on [Defendants’] assurances that the data and information that it produced would be sufficient, thus rendering the requested samples superfluous.

Yet [Defendants’] technical expert now opines “ISO 8217 does not allow for the use of Riazi or other estimations of flashpoint,” asserting that the only way to comply with Table 2 is through a D93 flashpoint test of a physical sample. [Defendants] manufactured a “catch-66”: [Defendants] withheld representative sample, providing only data from which flashpoint of the representative stream could be measured indirectly using calculations and models; but now argue[] that such indirect calculations and models are insufficient, testing of physical samples is required. [Defendants] effectively seek[] to force Magēmā to rely on its unrepresentative, upstream samples that include low volatile hydrocarbons. In this manner [Defendants] use[] [their] alleged inability to obtain the representative samples as both a sword and a shield in an effort to avoid infringement.¹³⁹

¹³⁷ (...continued)
Entry No. 161, pp. 8-9, and 24-30.

¹³⁸Id. at 7.

¹³⁹Id. at 7-8.

Plaintiff argues that

the Riazi calculations are sufficient to prove the Bayway Feed satisfies the flashpoint requirement of Table 2, and thus warrants summary judgment as to the disputed claim term. [Defendants'] contrary position that only actual sample tests are sufficient, if accepted, mandates application of [§] 295.¹⁴⁰

Plaintiff argues that

[i]f the Court applies [§] 295 to find a presumption of infringement, Defendants have no evidence (estimations or actual D93 tests) establishing the flashpoint of the feed, apart from irrelevant testing conducted on unrepresentative upstream samples. Consequently, partial summary judgment as to the Bayway feed should also be granted.¹⁴¹

Plaintiff asks the court to find that

[§] 295 is applicable not only for purposes of this motion for partial summary judgment, but also at trial, for both the Bayway and Wood River Refineries. Magēmā respectfully requests that the Court enter an order and instruct the jury consistent with the presumption and burden shifting provided under [§] 295.¹⁴²

Defendants respond that Plaintiff cannot shift the burden to prove infringement under 35 U.S.C. § 295 because they have provided extensive discovery of their accused processes.¹⁴³

¹⁴⁰Id. at 9.

¹⁴¹Id.

¹⁴²Id.

¹⁴³Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 176, pp. 24-30. See also id. at 24 (Arguing in addition that § 295 applies only to foreign manufacturers that avoid United States discovery, which does not apply here. Because the court concludes that Plaintiff has failed to show that it is unable to determine the process that Defendants
(continued...)

In reply Plaintiff argues that “the court can apply [§] 295’s presumption to a discrete issue, such as the elements of the asserted claims requiring a flashpoint of greater than 140° F,”¹⁴⁴ and that

Phillips has outright refused to provide samples that are clearly relevant to this issue that were specifically requested by Magēmā, and no amount of discovery on other aspects of the process can rectify this lack of cooperation. The court should therefore use the “potent weapon” provided by [§] 295 and shift the burden of proof as to any asserted claim requiring flashpoint of greater than 140° F.¹⁴⁵

(a) Applicable Law

“The patentee bears the burden of proving infringement by a preponderance of the evidence.” SRI International v. Matsushita Electric Corp., 775 F.2d 1107, 1123 (Fed. Cir. 1985). Nevertheless, the law makes exceptions. In actions alleging infringement of a process claim under § 271(g), there is a rebuttable presumption that the product was made from the patented process “if the court finds – (1) that a substantial likelihood exists that the product was made by the patented process, and (2) that the plaintiff has made a reasonable effort to determine

¹⁴³(...continued)
actually use to produce the accused low sulfur HMFO, the court need not reach Defendants’ alternative argument.).

¹⁴⁴Plaintiff’s Reply in Support of MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 192, p. 22.

¹⁴⁵Id.

the process actually used in the production of the product and was unable to so determine.” 35 U.S.C. § 295. If both conditions are met, “the product shall be presumed to have been so made, and the burden of establishing that the product was not made by the process shall be on the party asserting that it was not so made.” Id.

[T]he burden for establishing a substantial likelihood of infringement has been described as “less than . . . proving successfully at a trial by a fair preponderance of the evidence that a product in question was in fact made by the patented process but would be more than a slight possibility that the product was so made.”

United Therapeutics Corp. v. Liquidia Technologies, Inc., Civil Action No. 20-755-RGA, 2022 WL 850687, at *1 (D. Del. Mar. 22, 2022) (quoting LG Display Co. v. AU Optronics Corp., 709 F. Supp. 2d 311, 335 (D. Del. 2010)). In other words, the patentee “need only present evidence that would support a reasonable conclusion that the [accused] product was made by the patented process.” Id. (quoting LG Display, 709 F. Supp. 2d at 335).

In assessing the second requirement, “courts examine the patentee’s discovery efforts and consider whether the patentee followed all of the avenues of discovery likely to uncover the defendant’s process, including written discovery requests, facility inspections, first-hand observation of the process, independent testing of process samples, the use of experts, and depositions of the defendant’s officials.”

Id. (quoting LG Display, 709 F. Supp. 2d at 335). This assessment focuses on whether Plaintiff has information to determine the process used, not whether Plaintiff can prove infringement from that information. Id. at *3.

(b) Application of Law to the Undisputed Facts

Because Plaintiff neither argues nor shows that it is unable to determine the actual processes used by Defendants to produce low sulfur HMFO at the Bayway and Wood River refineries, the court declines Plaintiff's request to apply the § 295 presumption to its infringement claims. As detailed in Defendants' response to Plaintiff's request for application of the § 295 presumption,¹⁴⁶ Plaintiff has received voluminous discovery regarding Defendants' hydrotreating processes at both the Bayway and Wood River refineries. Moreover, Plaintiff has used the evidence it has received in discovery to argue that it is entitled to summary judgment of infringement at the Bayway refinery because the evidence shows that the flash point of the Bayway feed exceeds 140° F.¹⁴⁷ Neither Plaintiff's assertion that Defendants failed to produce samples from Plaintiff's preferred sampling location and successfully opposed Plaintiff's motion to compel the production of such samples, nor Plaintiff's assertion that "the court can apply [§] 295's presumption to a discrete issue, such as the elements of the asserted claims requiring a flashpoint of greater than 140° F,"¹⁴⁸ supports a finding that Defendants have failed to provide

¹⁴⁶Defendants' Response to Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 176, pp. 26-27.

¹⁴⁷Plaintiff's MPSJ and Application of 35 U.S.C. § 295, Docket Entry No. 161, pp. 13-24.

¹⁴⁸Plaintiff's Reply in Support of MPSJ and Application of 35 (continued...)

sufficient information for Plaintiff to determine the process actually used in the production of low sulfur HMFO as required by 35 U.S.C. § 295. Plaintiff's arguments are, instead, focused on whether Plaintiff can prove infringement, not whether Defendants have provided enough information for Plaintiff to determine the processes at issue. See United Therapeutics, 2022 WL 850687, at *3.

The voluminous documentation produced by Defendants is sufficient for Plaintiff to reasonably determine the process actually used by Defendants to produce low sulfur HMFO at the Bayway and Wood River refineries. See Nutrinova Nutrition Specialties & Food Ingredients GmbH v. International Trade Commission, 224 F.3d 1356, 1360 (Fed. Cir. 2000) (declining to apply the § 295 presumption where "a reasonable plaintiff would be able to determine the process used"). The extensive documentation that Defendants have provided to Plaintiff stands in stark contrast to the extremely limited documentation received by the patentees in cases that have applied the § 295 presumption. See, e.g., Creative Compounds, LLC v. Starmark Laboratories, 651 F.3d 1303, 1314-15 (Fed. Cir. 2011) (patentee received no documentation regarding the process performed by the foreign manufacturer); Dasso International, Inc. v. MOSO North America, Inc., Civil Action Nos. 17-1574-RGA and 19-564-RGA, 2021 WL 4427168, at *6 (D. Del.

¹⁴⁸(...continued)
U.S.C. § 295, Docket Entry No. 192, p. 22.

September 27, 2021) (same); Syngenta Crop Protection, LLC v. Willowood, LLC, No. 1:15-CV-274, 2017 WL 1133378, at *8-*11 (M.D.N.C. March 24, 2017) (patentee received some information about the manufacturing process, but did not receive any manufacturing or batch records to confirm the foreign supplier's testimony), aff'd in part, vacated in part, rev'd in part on other grounds, 944 F.3d 1344 (Fed. Cir. 2019), cert. denied, 141 S. Ct. 236 (2020). Accordingly, the court declines Plaintiff's request to apply the § 295 presumption.

V. Order

For the reasons stated above in § II, Defendants' Request for Leave to Supplement its Response to Magēmā's Motion for Partial Summary Judgment of Infringement, Docket Entry No. 198, is **DENIED**.

For the reasons stated above in § III.B.1, Defendants' motion to exclude the opinions and testimony of flash point at the Bayway refinery is **DENIED WITHOUT PREJUDICE**. For the reasons stated above in § III.B.2, Defendants' motion to exclude the opinions and testimony of damages at the Wood River the Bayway refineries is **DENIED WITHOUT PREJUDICE**. For the reasons stated above in § IV.C, Defendants' motion for partial summary judgment is **DENIED**. Accordingly, Defendants' Motion for Partial Summary Judgment of Noninfringement and Exclusion of Expert Testimony, Docket Entry No. 158, is **DENIED**.

For the reasons stated above in § III.C.1, Magēmā Technology LLC's Corrected Motion to Exclude the Opinions and Testimony of Defendants' Expert Edward L. Sughrue II, Docket Entry No. 163, is **DENIED**.

For the reasons stated above in § III.C.2, Magēmā's Motion to Strike Certain Opinions of Defendants' Damages Expert Thomas Britven, Docket Entry No. 155, is **DENIED as MOOT** without prejudice to being reurged at trial.

For the reasons stated above in § III.C.3, Plaintiff's request to strike the Declaration of Thomas Allen made in Magēmā's Reply Brief in Support of Its Motion for Partial Summary Judgment of Infringement and Application of 35 U.S.C. § 295 to Establish a Presumption of Infringement, Docket Entry No. 192, is **DENIED as MOOT** without prejudice to being reurged at trial.

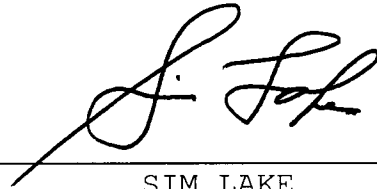
For the reasons stated above in § IV.D.1(b)(1), the court concludes that Plaintiff is entitled to partial summary judgment that the Bayway Hydrotreater's product is a Table 2 Compliant HMFO, but that for the reasons stated above in § IV.D.1.(b)(2), whether the Bayway Hydrotreater's feed is a Table 2 Compliant HMFO is a genuine dispute of material fact for trial. For the reasons stated above in § IV.D.2, Plaintiff's motion for application of 35 U.S.C. § 295 is **DENIED**. Accordingly, Magēmā's Motion for Partial Summary Judgment of Infringement and Application of 35 U.S.C. § 295 to

Establish a Presumption of Infringement, Docket Entry No. 161, is
GRANTED in PART and DENIED in PART.

The joint pretrial order with all required attachments will be filed by Friday, March 3, 2023, and Docket Call will held on Friday, March 9, 2023, at 2:00 p.m. in Courtroom 9-B, 9th Floor, United States Courthouse, 515 Rusk Avenue, Houston, Texas 77002.

No motions for limine or other pretrial motions will be allowed, including motions for reconsideration. The parties submit a pretrial memorandum not to exceed 25 total pages in which they may include evidentiary issues likely to arise at trial.

SIGNED at Houston, Texas, on this 19th day of January, 2023.

A handwritten signature in black ink, appearing to read 'S. Lake', is written over a horizontal line.

SIM LAKE
SENIOR UNITED STATES DISTRICT JUDGE